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<210> 5425
<211> 639
<212> DNA
<213> Homo sapiens
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<210> 5426
<211> 98
<212> PRT
<213> Homo sapiens
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4609

4610



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 120  
 gcgctgagct gggggaggcc ccgggctccc gcccagcct cgaagccccg cccagggctg  
 180  
 gatttgaatt gcttgtggct ccgcccacag cccattttcc tctggaagct gagacccccg  
 240  
 cccgtgccag ctgccacgcc cctgacaggt cctctgccac tctaagtcca ggccccgccc  
 300  
 accgcacaat gccagctctg ccactctaa ggtcccgcct acttccactc cttgggggag  
 360  
 gcacccctccc cttggctcctg tgggcccgtt ctccagcaga aaaccacgcc caccaagcag  
 420  
 agggcacgcc cacaaccgaa gtcaacgcca accctgtact caaacctcgg cccatagttc  
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 gcccatacgc gt  
 612

&lt;210&gt; 5430

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5430

Pro	Ala	Gly	Gly	Lys	Ala	Pro	Gly	Gln	His	Gly	Gly	Phe	Val	Val	Thr
1				5					10					15	
Val	Lys	Gln	Glu	Arg	Gly	Glu	Gly	Pro	Arg	Ala	Gly	Glu	Lys	Gly	Ser
			20					25					30		
His	Glu	Glu	Glu	Val	Arg	Val	Pro	Ala	Leu	Ser	Trp	Gly	Arg	Pro	Arg
		35					40					45			
Ala	Pro	Ala	Pro	Ala	Ser	Lys	Pro	Arg	Pro	Arg	Leu	Asp	Leu	Asn	Cys
		50				55					60				
Leu	Trp	Leu	Arg	Pro	Gln	Pro	Ile	Phe	Leu	Trp	Lys	Leu	Arg	Pro	Arg
65					70				75					80	
Pro	Val	Pro	Ala	Ala	Thr	Pro	Leu	Thr	Gly	Pro	Leu	Pro	Leu		
				85					90						

&lt;210&gt; 5431

&lt;211&gt; 3005

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5431

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 60  
 aggcacctgg cccgcatggc gagacacagt gccaacacca gcatgcatgc ccgcaacctg  
 120  
 gccattgtct gggcacccaa cctgctacgg tccatggagc tggagtcagt ggggaatgggt  
 180

ggcggggcgg cggtccggga agttcgggtg cagtcgggtg tggaggagtt tctgtcacc  
240  
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300  
tgctgtctcc ccaggcccaa gtcccttgcg ggcagctgcc cctccacccg cctgtgtacg  
360  
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420  
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480  
aagccagggg gcagcagctg gaagacgttc tttgcaactg gccggggccc cagtgtccct  
540  
cgaaagaagc ccctgccctg gctggggggc acccgtgcc caccgcagcc ttcaggcagc  
600  
agaccgcaca ccgtcacact gagatctgcc aagagcgagg agtctctgtc atcgcaggcc  
660  
agcggggctg gcctccagag gctgcacagg ctgcggcgac cccactccag cagcgacgt  
720  
ttccctgtgg gccagcacc tgctggctcc tgcgagagcc tgcctctgtc ctctctctcc  
780  
gagtcctcct cctctgagtc ctctctctcc tcctctgagt cctcagcagc tgggctgggg  
840  
gcactctctg ggtctccctc acaccgtacc tcagcctggc tagatgatgg tgatgagctg  
900  
gacttcagcc caccgccgtg cctggaggga ctccgggggc tggactttga tcccttaacc  
960  
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1020  
gcccctgcct ctgccttccc acccaggggtg acccccccagg ccatctcgcc ccgggggccc  
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1140  
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1740  
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1800

tcacagggtc ctacccccgg cttcttctcc ccagcccca gggagtgcct gccacccttc  
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 3005

&lt;210&gt; 5432

&lt;211&gt; 863

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5432

Xaa	His	Asp	Val	Ile	Gln	Gln	Leu	Pro	Pro	Pro	His	Tyr	Arg	Thr	Leu
1				5				10						15	
Glu	Tyr	Leu	Leu	Arg	His	Leu	Ala	Arg	Met	Ala	Arg	His	Ser	Ala	Asn
		20					25				30				
Thr	Ser	Met	His	Ala	Arg	Asn	Leu	Ala	Ile	Val	Trp	Ala	Pro	Asn	Leu

```

      35      40      45
Leu Arg Ser Met Glu Leu Glu Ser Val Gly Met Gly Gly Ala Ala Ala
 50      55      60
Phe Arg Glu Val Arg Val Gln Ser Val Val Val Glu Phe Leu Leu Thr
65      70      75      80
His Val Asp Val Leu Phe Ser Asp Thr Phe Thr Ser Ala Gly Leu Asp
      85      90      95
Pro Ala Gly Arg Cys Leu Leu Pro Arg Pro Lys Ser Leu Ala Gly Ser
      100      105      110
Cys Pro Ser Thr Arg Leu Leu Thr Leu Glu Glu Ala Gln Ala Arg Thr
      115      120      125
Gln Gly Arg Leu Gly Thr Pro Thr Glu Pro Thr Thr Pro Lys Ala Pro
      130      135      140
Ala Ser Pro Ala Glu Arg Lys Gly Glu Arg Gly Glu Lys Gln Arg
145      150      155      160
Lys Pro Gly Gly Ser Ser Trp Lys Thr Phe Phe Ala Leu Gly Arg Gly
      165      170      175
Pro Ser Val Pro Arg Lys Lys Pro Leu Pro Trp Leu Gly Gly Thr Arg
      180      185      190
Ala Pro Pro Gln Pro Ser Gly Ser Arg Pro Asp Thr Val Thr Leu Arg
      195      200      205
Ser Ala Lys Ser Glu Glu Ser Leu Ser Ser Gln Ala Ser Gly Ala Gly
      210      215      220
Leu Gln Arg Leu His Arg Leu Arg Arg Pro His Ser Ser Ser Asp Ala
225      230      235      240
Phe Pro Val Gly Pro Ala Pro Ala Gly Ser Cys Glu Ser Leu Ser Ser
      245      250      255
Ser Ser Ser Ser Glu Ser Ser Ser Ser Glu Ser Ser Ser Ser Ser Ser
      260      265      270
Glu Ser Ser Ala Ala Gly Leu Gly Ala Leu Ser Gly Ser Pro Ser His
      275      280      285
Arg Thr Ser Ala Trp Leu Asp Asp Gly Asp Glu Leu Asp Phe Ser Pro
      290      295      300
Pro Arg Cys Leu Glu Gly Leu Arg Gly Leu Asp Phe Asp Pro Leu Thr
305      310      315      320
Phe Arg Cys Ser Ser Pro Thr Pro Gly Asp Pro Ala Pro Pro Ala Ser
      325      330      335
Pro Ala Pro Pro Ala Pro Ala Ser Ala Phe Pro Pro Arg Val Thr Pro
      340      345      350
Gln Ala Ile Ser Pro Arg Gly Pro Thr Ser Pro Ala Ser Pro Ala Ala
      355      360      365
Leu Asp Ile Ser Glu Pro Leu Ala Val Ser Val Pro Pro Ala Val Leu
      370      375      380
Glu Leu Leu Gly Ala Gly Gly Ala Pro Ala Ser Ala Thr Pro Thr Pro
385      390      395      400
Ala Leu Ser Pro Gly Arg Ser Leu Arg Pro His Leu Ile Pro Leu Leu
      405      410      415
Leu Arg Gly Ala Glu Ala Pro Leu Thr Asp Ala Cys Gln Gln Glu Met
      420      425      430
Cys Ser Lys Leu Arg Gly Ala Gln Gly Pro Leu Gly Pro Asp Met Glu
      435      440      445
Ser Pro Leu Pro Pro Pro Pro Leu Ser Leu Leu Arg Pro Gly Gly Ala
      450      455      460
Pro Pro Pro Pro Pro Lys Asn Pro Ala Arg Leu Met Ala Leu Ala Leu

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465          470          475          480
Ala Glu Arg Ala Gln Gln Val Ala Glu Gln Gln Ser Gln Gln Glu Cys
          485          490          495
Gly Gly Thr Pro Pro Ala Ser Gln Ser Pro Phe His Arg Ser Leu Ser
          500          505          510
Leu Glu Val Gly Gly Glu Pro Leu Gly Thr Ser Gly Ser Gly Pro Pro
          515          520          525
Pro Asn Ser Leu Ala His Pro Gly Ala Trp Val Pro Gly Pro Pro Pro
          530          535          540
Tyr Leu Pro Arg Gln Gln Ser Asp Gly Ser Leu Leu Arg Ser Gln Arg
545          550          555          560
Pro Met Gly Thr Ser Arg Arg Gly Leu Arg Gly Pro Ala Gln Val Ser
          565          570          575
Ala Gln Leu Arg Ala Gly Gly Gly Gly Arg Asp Ala Pro Glu Ala Ala
          580          585          590
Ala Gln Ser Pro Cys Ser Val Pro Ser Gln Val Pro Thr Pro Gly Phe
          595          600          605
Phe Ser Pro Ala Pro Arg Glu Cys Leu Pro Pro Phe Leu Gly Val Pro
          610          615          620
Lys Pro Gly Leu Tyr Pro Leu Gly Pro Pro Ser Phe Gln Pro Ser Ser
625          630          635          640
Pro Ala Pro Val Trp Arg Ser Ser Leu Gly Pro Pro Ala Pro Leu Asp
          645          650          655
Arg Gly Glu Asn Leu Tyr Tyr Glu Ile Gly Ala Ser Glu Gly Ser Pro
          660          665          670
Tyr Ser Gly Pro Thr Arg Ser Trp Ser Pro Phe Arg Ser Met Pro Pro
          675          680          685
Asp Arg Leu Asn Ala Ser Tyr Gly Met Leu Gly Gln Ser Pro Pro Leu
          690          695          700
His Arg Ser Pro Asp Phe Leu Leu Ser Tyr Pro Pro Ala Pro Ser Cys
705          710          715          720
Phe Pro Pro Asp His Leu Gly Tyr Ser Ala Pro Gln His Pro Ala Arg
          725          730          735
Arg Pro Thr Pro Pro Glu Pro Leu Tyr Val Asn Leu Ala Leu Gly Pro
          740          745          750
Arg Gly Pro Ser Pro Ala Ser Ser Ser Ser Ser Pro Pro Ala His
          755          760          765
Pro Arg Ser Arg Ser Asp Pro Gly Pro Pro Val Pro Arg Leu Pro Gln
          770          775          780
Lys Gln Arg Ala Pro Trp Gly Pro Arg Thr Pro His Arg Val Pro Gly
785          790          795          800
Pro Trp Gly Pro Pro Glu Pro Leu Leu Leu Tyr Arg Ala Ala Pro Pro
          805          810          815
Ala Tyr Gly Arg Gly Gly Glu Leu His Arg Gly Ser Leu Tyr Arg Asn
          820          825          830
Gly Gly Gln Arg Gly Glu Gly Ala Gly Pro Pro Pro Pro Tyr Pro Thr
          835          840          845
Pro Ser Trp Ser Leu His Ser Glu Gly Gln Thr Arg Ser Tyr Cys
          850          855          860

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&lt;210&gt; 5433

&lt;211&gt; 385

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5433

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 120  
 ctgggtataa gaagctcctc tgggtctccag agttctcgga gtaacccctc catccaagcc  
 180  
 acgctcaata agactgtgct ttctctcttc ttaaataacc acccacagac atctgttccc  
 240  
 aacgcatctg ctcttcaccc ttcgctccgt ctgttttccc ttagcaaccc atctctttcc  
 300  
 accacaaacc tgagcggccc gtctcggcgt cggcagcctc ccgtcagccc tctcacgctt  
 360  
 tctcctggcc ctgaagcaca tcaag  
 385

&lt;210&gt; 5434

&lt;211&gt; 128

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5434

Asp	Leu	Thr	Asn	Leu	His	Tyr	Ser	Thr	Pro	Leu	Pro	Ala	Ser	Leu	Asp
1			5					10					15		
Thr	Thr	Asp	His	His	Phe	Gly	Ser	Met	Ser	Val	Gly	Asn	Ser	Val	Asn
			20				25					30			
Asn	Ile	Pro	Ala	Ala	Met	Thr	His	Leu	Gly	Ile	Arg	Ser	Ser	Ser	Gly
		35				40					45				
Leu	Gln	Ser	Ser	Arg	Ser	Asn	Pro	Ser	Ile	Gln	Ala	Thr	Leu	Asn	Lys
	50				55					60					
Thr	Val	Leu	Ser	Ser	Ser	Leu	Asn	Asn	His	Pro	Gln	Thr	Ser	Val	Pro
65					70				75					80	
Asn	Ala	Ser	Ala	Leu	His	Pro	Ser	Leu	Arg	Leu	Phe	Ser	Leu	Ser	Asn
			85					90					95		
Pro	Ser	Leu	Ser	Thr	Thr	Asn	Leu	Ser	Gly	Pro	Ser	Arg	Arg	Arg	Gln
			100				105					110			
Pro	Pro	Val	Ser	Pro	Leu	Thr	Leu	Ser	Pro	Gly	Pro	Glu	Ala	His	Gln
		115					120					125			

&lt;210&gt; 5435

&lt;211&gt; 617

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5435

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 60  
 aaacagataa ttctttatat tcaacctgtt gtcaaaattt ttagaaacat tttccagtt  
 120  
 ccttgataa gtatactttg tataacttct ggcaaaccat aattatgaac tcacattact  
 180  
 atagtactat aatactgcag aaagggatct tgcgtttcag aaatgtcact catccagttt  
 240

tctctccctt tctctaacc cctctccctc ccaggtcat ggtttctgtt gcaatcctct  
 300  
 ttctccttac acaaggcaag aagttttctt accaatagat cagacctgtg aaggactgcc  
 360  
 cgacatgata tgatatgggt gttcttcatt ttgggctgta gtattttaaa gtagagggtt  
 420  
 gctctgatgg tcccatcact gcttgccatt gtctttccct ttgctctagc tatcagggga  
 480  
 tggtgcttta agtttggtcc ccaggcttta ctgccaagag ggaaattcat acccacttta  
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 600  
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 617

<210> 5436

<211> 119

<212> PRT

<213> Homo sapiens

<400> 5436

Met	Asn	Phe	Pro	Leu	Gly	Ser	Lys	Ala	Trp	Gly	Thr	Asn	Leu	Lys	Gln
1				5					10					15	
His	Pro	Leu	Ile	Ala	Arg	Ala	Lys	Gly	Lys	Thr	Met	Ala	Ser	Ser	Asp
			20					25					30		
Gly	Thr	Ile	Arg	Ala	Asn	Leu	Tyr	Phe	Lys	Ile	Leu	Gln	Pro	Lys	Met
		35				40						45			
Lys	Asn	Asn	His	Ile	Arg	Ser	Cys	Arg	Ala	Val	Leu	His	Arg	Ser	Asp
	50					55					60				
Leu	Leu	Val	Arg	Lys	Leu	Leu	Ala	Leu	Cys	Lys	Glu	Lys	Glu	Asp	Cys
65					70				75					80	
Asn	Arg	Asn	His	Glu	Pro	Gly	Arg	Glu	Met	Gly	Leu	Glu	Lys	Gly	Glu
			85					90						95	
Glu	Asn	Trp	Met	Ser	Asp	Ile	Ser	Glu	Thr	Gln	Asp	Pro	Phe	Leu	Gln
		100						105					110		
Tyr	Tyr	Ser	Thr	Ile	Val	Met									
															115

<210> 5437

<211> 1422

<212> DNA

<213> Homo sapiens

<400> 5437

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 120  
 ttctcggggt ttctgacctc ctgcagcctc ctcttgccctc gggctgcccc gatcttgagg  
 180  
 gctgaggctg gcttaccttc gagccgttcc ttcatgggat ttgctgctcc cttcaccaac  
 240  
 aagcgaaagg cttactcgga gcgtagaatc atgggggtact caatgcagga gatgtatgag  
 300

gtggtgtcca acgtccagga gtatcgtgag tttgtgccct ggtgtaagaa gtctctggtg  
 360  
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 540  
 tatcctcgaa cctgcactgt ggacttttcg atttcctttg aatttcgttc tctgctgcac  
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 660  
 cgtcgggcag ccaccaagtt tgggtccagaa acagccatcc cccgtgaact gatgttccat  
 720  
 gaggtgcacc agacttgagg caagggattg ctccctgacc tcccttctac cccacttccc  
 780  
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 960  
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 1020  
 gttgtctctg gaccttatca agacacctta gtgtctgacc aggggacgat agtaactttt  
 1080  
 ctaaggattg aataaattga gcttttcttc tggcacagag gtactgagtg gtaagtaact  
 1140  
 tttaccctgc ctgagattcc tcaggagaaa aggcaacctg cctccagcct gaaatacata  
 1200  
 aagcctcatt ttaagactgt aagtccatgc tgcctggcta ctagagagca aggggctttc  
 1260  
 ttaccaccag tgctgaggag aaaagtactg aacggaaacg gagttgtctt tgtactcttg  
 1320  
 agttgtacct tattcttcca ctggcctga gtttttataa aatttcaata aattgtgaca  
 1380  
 gtgtgaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa  
 1422

&lt;210&gt; 5438

&lt;211&gt; 245

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5438

Phe Arg Gly Gly Gly Val Leu Tyr Trp Asp Ala Gly Ala Ala Gly Thr  
 1 5 10 15  
 Gly Ser Asn His Ala Leu Gly Ala Asn Val Glu Leu Trp Ile Met Leu  
 20 25 30  
 Leu Gln Val Val Arg Glu Gly Lys Phe Ser Gly Phe Leu Thr Ser Cys  
 35 40 45  
 Ser Leu Leu Leu Pro Arg Ala Ala Gln Ile Leu Ala Ala Glu Ala Gly  
 50 55 60  
 Leu Pro Ser Ser Arg Ser Phe Met Gly Phe Ala Ala Pro Phe Thr Asn



```

65          70          75          80
Lys Arg Lys Ala Tyr Ser Glu Arg Arg Ile Met Gly Tyr Ser Met Gln
          85          90          95
Glu Met Tyr Glu Val Val Ser Asn Val Gln Glu Tyr Arg Glu Phe Val
          100          105          110
Pro Trp Cys Lys Lys Ser Leu Val Val Ser Ser Arg Lys Gly His Leu
          115          120          125
Lys Ala Gln Leu Glu Val Gly Phe Pro Pro Val Met Glu Arg Tyr Thr
          130          135          140
Ser Ala Val Ser Met Val Lys Pro His Met Val Lys Ala Val Cys Thr
          145          150          155          160
Asp Gly Lys Leu Phe Asn His Leu Glu Thr Ile Trp Arg Phe Ser Pro
          165          170          175
Gly Ile Pro Ala Tyr Pro Arg Thr Cys Thr Val Asp Phe Ser Ile Ser
          180          185          190
Phe Glu Phe Arg Ser Leu Leu His Ser Gln Leu Ala Thr Met Phe Phe
          195          200          205
Asp Glu Val Val Lys Gln Asn Val Ala Ala Phe Glu Arg Arg Ala Ala
          210          215          220
Thr Lys Phe Gly Pro Glu Thr Ala Ile Pro Arg Glu Leu Met Phe His
          225          230          235          240
Glu Val His Gln Thr
          245

```

&lt;210&gt; 5439

&lt;211&gt; 4234

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5439

```

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120
atcaaagttg tgggaaaatg gaaggaagtg aagattgacc caaatatgtt tgcagatgga
180
cagatggatg acttggtgtg ctttgaggaa ttgacagatt accagttggt ctccctgcc
240
aagaatccct ccagtctctt ctcaaaggaa gcaccaaga gaaaggcaca agctgtttca
300
gaagaagagg aggaggagga gggaaagtct agctcaccaa agaaaaagat caagttgaag
360
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420
cctgagctgg aggccaggag agatgacatg gtttgtgatg atccggaggc tggggagatg
480
acatcagaaa acctggtcca aactgctcca aaaaagaaga aaaataaagg gaaaaaggg
540
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<211> 461

<212> PRT

<213> Homo sapiens

<400> 5440

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Gln	Arg	Met	Leu	Asn	Arg	Arg	Pro	Glu	Ile	Val	Val	Ala	Thr	Pro	Gly
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Arg	Leu	Trp	Glu	Leu	Ile	Lys	Glu	Lys	His	Tyr	His	Leu	Arg	Asn	Leu
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Arg	Gln	Leu	Arg	Cys	Leu	Val	Val	Asp	Glu	Ala	Asp	Arg	Met	Val	Glu
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Thr	Leu	Val	His	Gln	Ala	Pro	Ala	Arg	Ile	Leu	His	Lys	Lys	His	Thr
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Leu	Val	Phe	Ala	Asn	Ser	Ile	Ser	Cys	Ile	Lys	Arg	Leu	Ser	Gly	Leu
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Cys	Val	Leu	Leu	Ala	Thr	Asp	Val	Ala	Ala	Arg	Gly	Leu	Asp	Ile	Pro
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&lt;210&gt; 5441

&lt;211&gt; 1635

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5441

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&lt;210&gt; 5442

&lt;211&gt; 250

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5442

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Val Cys Leu Ile Asp Pro Gly Cys Phe Arg Glu Ile Asp Glu Leu Ile				
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&lt;210&gt; 5443

&lt;211&gt; 2021

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5443

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 2021

&lt;210&gt; 5444

&lt;211&gt; 438

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5444

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Lys	Ile	Arg	Leu	Arg	Cys	Gln	Lys	Gly	Ile	Pro	Pro	Ser	Leu	Arg	Gly
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Arg	Ala	Trp	Gln	Tyr	Leu	Ser	Gly	Gly	Lys	Val	Lys	Leu	Gln	Gln	Asn
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Pro	Gly	Lys	Phe	Asp	Glu	Leu	Asp	Met	Ser	Pro	Gly	Asp	Pro	Lys	Trp
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Leu	Asp	Val	Ile	Glu	Arg	Asp	Leu	His	Arg	Gln	Phe	Pro	Phe	His	Glu



4627

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&lt;210&gt; 5446

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5446

Met Ala Val Ile Lys Glu Thr Val Thr Arg Val Gly Arg Trp Arg Cys  
 1 5 10 15  
 Glu Ser Lys His Thr Thr Cys Ala Lys Val Lys Trp Pro Gln Pro Pro  
 20 25 30  
 Arg Lys Thr Gly Trp Arg Phe Leu Arg Arg Ser Thr His Ser Arg His  
 35 40 45  
 Gly Thr Gln Trp Phe His Pro Gln Val Cys Ser Asn Arg His His Ser  
 50 55 60  
 Pro Arg Pro His Ala Asp Ser Asp Thr Arg Ala His Ser Pro Arg Ser

65		70		75		80									
His	Ala	Asp	Ser	Asp	Met	Arg	Ala	His	Ser	Leu	Ser	His	Asp	Ser	Gln
			85						90					95	
Thr	Val	Glu	Thr	Arg	Gln	Val	Gly	Leu	Gly	Cys					
			100					105							

&lt;210&gt; 5447

&lt;211&gt; 1444

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5447

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 1444

<210> 5448  
 <211> 189  
 <212> PRT  
 <213> Homo sapiens

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 Ala Leu His Ser Ala Leu Gly Gly Thr Lys Lys Lys Lys Lys Thr Ile  
 35 40 45  
 Val Thr Asp Val Phe Gln Gly Ser Met Arg Ile Phe Thr Lys Lys Leu  
 50 55 60  
 Pro His Pro Asp Leu Pro Ala Glu Glu Lys Glu Gln Leu Leu His Asn  
 65 70 75 80  
 Asp Glu Tyr Gln Glu Thr Met Val Glu Ser Thr Phe Met Tyr Leu Thr  
 85 90 95  
 Leu Asp Leu Pro Thr Ala Pro Leu Tyr Lys Asp Glu Lys Glu Gln Leu  
 100 105 110  
 Ile Ile Pro Gln Val Pro Leu Phe Asn Ile Leu Ala Lys Phe Asn Gly  
 115 120 125  
 Ile Thr Glu Lys Glu Tyr Lys Thr Tyr Lys Glu Asn Phe Leu Lys Arg  
 130 135 140  
 Phe Gln Leu Thr Lys Leu Pro Pro Tyr Leu Ile Phe Cys Ile Lys Arg  
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<210> 5449  
 <211> 1359  
 <212> DNA  
 <213> Homo sapiens

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 180  
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 720  
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 1320  
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 1359

&lt;210&gt; 5450

&lt;211&gt; 293

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5450

Ser Pro Glu Glu Asp Gln Arg Thr Tyr Val Phe Arg Ala Gln Ser Ala  
 1 5 10 15  
 Glu Met Lys Glu Arg Gly Gly Asn Gln Thr Ser Gly Ile Asp Phe Phe  
 20 25 30  
 Ile Thr Gln Glu Arg Ile Val Phe Leu Asp Thr Gln Pro Ile Leu Ser  
 35 40 45  
 Pro Ser Ile Leu Asp His Leu Ile Asn Asn Asp Arg Lys Leu Pro Pro  
 50 55 60  
 Glu Tyr Asn Leu Pro His Thr Tyr Val Glu Met Gln Ser Leu Gln Ile

```

65          70          75          80
Ala Ala Phe Leu Phe Thr Val Cys His Val Gly Ile Xaa Val Gln Asp
      85          90          95
Trp Phe Thr Asp Leu Ser Leu Tyr Arg Phe Leu Gln Thr Ala Glu Met
      100          105          110
Val Lys Pro Ser Thr Pro Ser Pro Ser His Glu Ser Ser Ser Ser Ser
      115          120          125
Gly Ser Asp Glu Gly Thr Glu Tyr Tyr Pro His Leu Val Phe Phe Gln
      130          135          140
Asn Lys Ala Arg Arg Glu Asp Phe Cys Pro Arg Lys Leu Arg Gln Met
      145          150          155          160
His Leu Met Ile Asp Gln Leu Met Ala His Ser His Leu Arg Tyr Lys
      165          170          175
Gly Thr Leu Ser Met Leu Gln Cys Asn Val Phe Pro Gly Leu Pro Pro
      180          185          190
Asp Phe Leu Asp Ser Glu Val Asn Leu Phe Leu Val Pro Phe Met Asp
      195          200          205
Ser Glu Ala Glu Ser Glu Asn Pro Pro Arg Ala Gly Pro Gly Ser Ser
      210          215          220
Pro Leu Phe Ser Leu Leu Pro Gly Tyr Arg Gly His Pro Ser Phe Gln
      225          230          235          240
Ser Leu Val Ser Lys Leu Arg Ser Gln Val Met Ser Met Ala Arg Pro
      245          250          255
Gln Leu Ser His Thr Ile Leu Thr Glu Lys Asn Trp Phe His Tyr Ala
      260          265          270
Ala Arg Ile Trp Asp Gly Val Arg Lys Ser Ser Ala Leu Ala Glu Tyr
      275          280          285
Ser Arg Leu Leu Ala
      290

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&lt;210&gt; 5451

&lt;211&gt; 1184

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5451

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540

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 1184

&lt;210&gt; 5452

&lt;211&gt; 206

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5452

Met Ser Ser Val Tyr Pro Arg Pro Leu Glu Gly Glu Ser Arg Ala Leu  
 1 5 10 15  
 Arg Lys Gly Ser His Leu Leu Ser Leu Ala Glu Pro Leu Pro Pro Tyr  
 20 25 30  
 Ser Ser Pro Glu Leu Ser Val Ala Phe His His Ser Gly Pro Ser Cys  
 35 40 45  
 Leu Ser Pro Ala Leu Ser Gln Thr Thr Gln Lys Ser Gly His Leu Trp  
 50 55 60  
 Ala Pro Gly Met Val Thr Glu Glu Lys His Ala Val Pro Val Ser Pro  
 65 70 75 80  
 Gly Phe Cys Gln Lys Ile Glu Gln Val Gln Leu Thr His Cys Tyr Cys  
 85 90 95  
 Arg Ser Leu Lys Leu Pro Gly Leu Val Leu Asp Pro Ser Arg Asn His  
 100 105 110  
 Gln Val Arg His Leu Glu Pro Pro Gly Glu Gly Pro Pro Ser Arg Ala  
 115 120 125  
 Leu Lys Glu Leu His Glu Ile Arg Asn Cys Leu Met Lys Cys Ile Ser  
 130 135 140  
 Leu Tyr Leu Glu Asp Glu Ala Gln Thr Pro Thr Pro Leu Ser Pro Pro  
 145 150 155 160  
 Gly Leu Gly Met Ser Pro Ala Ala Arg Pro Arg Ser Phe Pro Gly Gly  
 165 170 175  
 Leu Gly Glu Val Gly Ala Gly Thr Ile Ser Val Pro Ser Thr Leu Thr  
 180 185 190  
 Pro Ser Thr Ser Glu Thr Thr Leu Pro Gln Pro Asp Thr Glu

195

200

205

&lt;210&gt; 5453

&lt;211&gt; 1974

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5453

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1380



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 1920  
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 1974

&lt;210&gt; 5454

&lt;211&gt; 320

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5454

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Val	Tyr	Arg	Ser	Arg	Asp	Phe	Leu	Val	Val	Asn	Lys	His	Trp	Asp	Val
			20				25						30		
Arg	Ile	Asp	Ser	Lys	Ala	Trp	Arg	Glu	Thr	Leu	Thr	Leu	Gln	Lys	Gln
			35				40						45		
Leu	Arg	Tyr	Arg	Phe	Pro	Glu	Leu	Ala	Asp	Pro	Asp	Thr	Cys	Tyr	Gly
			50				55					60			
Phe	Arg	Phe	Cys	His	Gln	Leu	Asp	Phe	Ser	Thr	Ser	Gly	Ala	Leu	Cys
					70					75				80	
Val	Ala	Leu	Asn	Lys	Ala	Ala	Ala	Gly	Ser	Ala	Tyr	Arg	Cys	Phe	Lys
					85					90				95	
Glu	Arg	Arg	Val	Thr	Lys	Ala	Tyr	Leu	Ala	Leu	Leu	Arg	Gly	His	Ile
					100					105				110	
Gln	Glu	Ser	Arg	Val	Thr	Ile	Ser	His	Ala	Ile	Gly	Arg	Asn	Ser	Thr
					115					120				125	
Glu	Gly	Arg	Ala	His	Thr	Met	Cys	Ile	Glu	Gly	Ser	Gln	Gly	Val	Ala
							135					140			
Gly	Cys	Glu	Asn	Pro	Lys	Pro	Ser	Leu	Thr	Asp	Leu	Val	Val	Leu	Glu
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His	Gly	Leu	Tyr	Ala	Gly	Asp	Pro	Val	Ser	Lys	Val	Leu	Leu	Lys	Pro
					165					170				175	
Leu	Thr	Gly	Arg	Thr	His	Gln	Leu	Arg	Val	His	Cys	Ser	Ala	Leu	Gly
					180					185				190	
His	Pro	Val	Val	Gly	Asp	Leu	Thr	Tyr	Gly	Glu	Val	Ser	Gly	Arg	Glu
					195					200				205	
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210	215	220
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225	230	235
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	245	250
Gln Leu Val Gln Ala Leu Arg Ala Thr Pro Asp Pro Asp Pro Glu Asp		255
	260	265
Arg Gly Pro Arg Pro Gly Ser Pro Ser Ala Leu Leu Pro Gly Pro Gly		270
	275	280
Arg Pro Pro Pro Pro Pro Thr Lys Pro Pro Glu Thr Glu Ala Gln Arg		285
	290	295
Gly Pro Cys Leu Gln Trp Leu Ser Glu Trp Thr Leu Glu Pro Asp Ser		300
305	310	315
		320

&lt;210&gt; 5455

&lt;211&gt; 975

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5455

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975

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 <211> 149  
 <212> PRT  
 <213> Homo sapiens

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 Leu Tyr Gly Leu Ala Ser Phe Arg Pro Gly Val Gly Pro His Pro Thr  
 35 40 45  
 His Cys Pro Leu Ala Val Arg Leu Ala Cys Pro Ala Val Pro Thr Thr  
 50 55 60  
 Val Val Lys Gln Arg Leu Gln Met Tyr Asn Ser Gln His Arg Ser Ala  
 65 70 75 80  
 Ile Ser Cys Ile Arg Thr Val Trp Arg Thr Glu Gly Leu Gly Ala Phe  
 85 90 95  
 Tyr Arg Ser Tyr Thr Thr Gln Leu Thr Met Asn Ile Pro Phe Gln Ser  
 100 105 110  
 Ile His Phe Ile Thr Tyr Glu Phe Leu Gln Glu Gln Val Asn Pro His  
 115 120 125  
 Arg Thr Tyr Asn Pro Gln Ser His Ile Ile Ser Gly Gly Leu Ala Gly  
 130 135 140  
 Ala Leu Ala Ala Ala  
 145

<210> 5457  
 <211> 448  
 <212> DNA  
 <213> Homo sapiens

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<210> 5458  
 <211> 81  
 <212> PRT

<213> Homo sapiens

<400> 5458

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Tyr Glu Asn Leu Pro Thr Ser Ala Ser Val Ser Thr His Met Thr Ala
      35           40           45
Gly Ala Met Ala Gly Ile Leu Glu His Ser Val Met Tyr Pro Val Asp
      50           55           60
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<210> 5459

<211> 1468

<212> DNA

<213> Homo sapiens

<400> 5459

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120
cggatggagc tgcgcagcgg gagcgtgggc agccaggcgg tggcgcgagg gatggatggg
180
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240
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300
cactcgggtca tgtaccgggt ggactcgggt aagacacgaa tgcagagttt gagtccagat
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420
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480
atgtattttg cctgctatga aaacatgaaa aggactttaa atgacgtttt ccaccaccaa
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720
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780
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840
tattttttt gtttgtttt tttttaaaca ttcaaaagca attaatgatc agacatagga
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960

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 1140  
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<210> 5460

<211> 155

<212> PRT

<213> Homo sapiens

<400> 5460

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		20					25				30				
Ser	Glu	Asp	Tyr	Glu	Asn	Leu	Pro	Thr	Ser	Ala	Ser	Val	Ser	Thr	His
	35				40					45					
Met	Thr	Ala	Gly	Ala	Met	Ala	Gly	Ile	Leu	Glu	His	Ser	Val	Met	Tyr
	50				55					60					
Pro	Val	Asp	Ser	Val	Lys	Thr	Arg	Met	Gln	Ser	Leu	Ser	Pro	Asp	Pro
65				70				75					80		
Lys	Ala	Gln	Tyr	Thr	Ser	Ile	Tyr	Gly	Ala	Leu	Lys	Lys	Ile	Met	Gln
		85						90					95		
Thr	Glu	Gly	Phe	Trp	Arg	Pro	Leu	Arg	Gly	Val	Asn	Val	Met	Ile	Met
	100						105					110			
Gly	Ala	Gly	Pro	Ala	His	Ala	Met	Tyr	Phe	Ala	Cys	Tyr	Glu	Asn	Met
	115					120					125				
Lys	Arg	Thr	Leu	Asn	Asp	Val	Phe	His	His	Gln	Gly	Asn	Ser	His	Leu
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Ala	Asn	Gly	Ile	Leu	Lys	Ala	Phe	Val	Trp	Ser					
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<210> 5461

<211> 1725

<212> DNA

<213> Homo sapiens

<400> 5461

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180  
atatggagcg aaatattttc ctgaatatgc agagaaaatt cctggtgaat ccacacagaa  
240  
gctttctgaa gtagcaaagg aatgcagcat atatctcatt ggaggtaact tctacccac  
300  
aaggctctat ccctgaagag gatgctggga aattatataa cacctgtgct gtgtttgggc  
360  
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420  
gaaaaattac atttcaagaa tctaaaacat tgagtccggg tgatagtctt tccacatttg  
480  
atactcgtat gtaccagata agtttgcttc tttagcaatc tcagtagaag acaatcaggt  
540  
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780  
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1260  
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1320  
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<210> 5462

<211> 159

<212> PRT

<213> Homo sapiens

<400> 5462

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		20						25					30		
Leu	Gly	Ile	Cys	Tyr	Asp	Met	Arg	Phe	Ala	Glu	Leu	Ala	Gln	Ile	Tyr
	35					40						45			
Ala	Gln	Arg	Gly	Cys	Gln	Leu	Leu	Val	Tyr	Pro	Gly	Ala	Phe	Asn	Leu
	50				55						60				
Thr	Thr	Gly	Pro	Ala	His	Trp	Glu	Leu	Leu	Gln	Arg	Ser	Arg	Ala	Val
65					70					75				80	
Asp	Asn	Gln	Val	Tyr	Val	Ala	Thr	Ala	Ser	Pro	Ala	Arg	Asp	Asp	Lys
			85						90				95		
Ala	Ser	Tyr	Val	Ala	Trp	Gly	His	Ser	Thr	Val	Val	Asn	Pro	Trp	Gly
		100					105					110			
Glu	Val	Leu	Ala	Lys	Ala	Gly	Thr	Glu	Glu	Ala	Ile	Val	Tyr	Ser	Asp
	115					120					125				
Ile	Asp	Leu	Lys	Lys	Leu	Ala	Glu	Ile	Arg	Gln	Gln	Ile	Pro	Val	Phe
	130				135					140					
Arg	Gln	Lys	Arg	Ser	Asp	Leu	Tyr	Ala	Val	Glu	Met	Lys	Lys	Pro	
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<210> 5463

<211> 792

<212> DNA

<213> Homo sapiens

<400> 5463

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gacaaaggcg agggacaaga gagagttaac atctagacag tggaaaaagc catggtgtgt  
180  
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240  
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300  
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360  
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420  
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480  
gggatagctg ggagtatggc caccctgtc cacgatgcg taatgaatcc agcagaagt  
540

gtgaagcagc gcttgcagat gtacaactcg cagcaccggt cagcaatcag ctgcatccgg  
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 660  
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 792

<210> 5464  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 5464  
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 Gln Met Tyr Asn Ser Gln His Arg Ser Ala Ile Ser Cys Ile Arg Thr  
 35 40 45  
 Val Trp Arg Thr Glu Gly Leu Gly Ala Phe Tyr Arg Ser Tyr Thr Thr  
 50 55 60  
 Gln Leu Thr Met Asn Ile Pro Phe Gln Ser Ile His Phe Ile Thr Tyr  
 65 70 75 80  
 Glu Phe Leu Gln Glu Gln Val Asn Pro His Arg Thr Tyr Asn Pro Gln  
 85 90 95  
 Ser His Ile Ile Ser Gly Gly Leu Ala Gly Ala Leu Ala Ala Ala  
 100 105 110

<210> 5465  
 <211> 497  
 <212> DNA  
 <213> Homo sapiens

<400> 5465  
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 120  
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 300  
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 360  
 aacccccggc aggagacctc cctgacccc tctgtgcct ctctgtggg accctccagt  
 420  
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<210> 5466  
<211> 134  
<212> PRT  
<213> Homo sapiens

<400> 5466  
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20 25 30  
Val Arg Asp Glu Pro Pro Ala Lys Pro Val Gly Met Ser Gly Pro Ser  
35 40 45  
Trp Trp Asp Cys Leu Gly His Arg His Gln His Gly Val Arg Ala Ile  
50 55 60  
Ser Gly Asp Ile Gly Gly Ala Thr Thr Arg Trp Gly Ile Phe Asn Arg  
65 70 75 80  
Leu Glu Pro Leu Arg Leu Glu Arg Pro Thr Pro Gly Arg Arg Pro Pro  
85 90 95  
Leu Thr Pro Leu Leu Pro Leu Leu Trp Asp Pro Pro Val Asp Thr Pro  
100 105 110  
Asp Glu Asp Thr Gln Glu Ala Ser Ser Gln Asp Arg Arg Gln Leu Pro  
115 120 125  
Gly Gln Pro Arg Ser Ala  
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<210> 5467  
<211> 1329  
<212> DNA  
<213> Homo sapiens

<400> 5467  
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120  
cccggatcca gcttctctgga cttgggggat ctgaacgagt cggacttcct caacaatgcg  
180  
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600

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 720  
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 1320  
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 1329

&lt;210&gt; 5468

&lt;211&gt; 363

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5468

Met	Asp	Ala	Val	Leu	Glu	Pro	Phe	Pro	Ala	Asp	Arg	Leu	Phe	Pro	Gly
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Ser	Ser	Phe	Leu	Asp	Leu	Gly	Asp	Leu	Asn	Glu	Ser	Asp	Phe	Leu	Asn
			20					25					30		
Asn	Ala	His	Phe	Pro	Glu	His	Leu	Asp	His	Phe	Thr	Glu	Asn	Met	Glu
		35					40					45			
Asp	Phe	Ser	Asn	Asp	Leu	Phe	Ser	Ser	Phe	Phe	Asp	Asp	Pro	Val	Leu
	50					55					60				
Asp	Glu	Lys	Ser	Pro	Leu	Leu	Asp	Met	Glu	Leu	Asp	Ser	Pro	Thr	Pro
65					70					75				80	
Gly	Ile	Gln	Ala	Glu	His	Ser	Tyr	Ser	Leu	Ser	Gly	Asp	Ser	Ala	Pro
			85						90					95	
Gln	Ser	Pro	Leu	Val	Pro	Ile	Lys	Met	Glu	Asp	Thr	Thr	Gln	Asp	Ala
			100						105					110	
Glu	His	Gly	Ala	Trp	Ala	Leu	Gly	His	Lys	Leu	Cys	Ser	Ile	Met	Val
		115					120					125			
Lys	Gln	Glu	Gln	Ser	Pro	Glu	Leu	Pro	Val	Asp	Pro	Leu	Ala	Ala	Pro
		130					135					140			
Ser	Ala	Met	Ala	Ala	Ala	Ala	Ala	Met	Ala	Thr	Thr	Pro	Leu	Leu	Gly
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<210> 5469
<211> 1292
<212> DNA
<213> Homo sapiens
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<400> 5469
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180
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300
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660

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 1292

&lt;210&gt; 5470

&lt;211&gt; 427

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5470

Xaa Ala Ala Ala Ser Thr Glu Gly Glu Asp Val Gly Trp Trp Arg Ser  
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 Leu Glu Phe Met Lys Arg Asp Leu Thr Glu Phe Thr Gln Val Val Gln  
 35 40 45  
 His Asp Thr Ala Cys Thr Ile Ala Ala Thr Ala Ser Val Val Lys Glu  
 50 55 60  
 Lys Leu Ala Thr Glu Gly Ser Ser Gly Ala Thr Glu Lys Met Lys Lys  
 65 70 75 80  
 Gly Leu Ser Asp Phe Leu Gly Val Ile Ser Asp Thr Phe Ala Pro Ser  
 85 90 95  
 Pro Asp Lys Thr Ile Asp Cys Asp Val Ile Thr Leu Met Gly Thr Pro  
 100 105 110  
 Ser Gly Thr Ala Glu Pro Tyr Asp Gly Thr Lys Ala Arg Leu Tyr Ser  
 115 120 125  
 Leu Gln Ser Asp Pro Ala Thr Tyr Cys Asn Glu Pro Asp Gly Pro Pro  
 130 135 140  
 Glu Leu Phe Asp Ala Trp Leu Ser Gln Phe Cys Leu Glu Glu Lys Lys  
 145 150 155 160  
 Gly Glu Ile Ser Glu Leu Leu Val Gly Ser Pro Ser Ile Arg Ala Leu  
 165 170 175  
 Tyr Thr Lys Met Val Pro Ala Ala Val Ser His Ser Glu Phe Trp His  
 180 185 190  
 Arg Tyr Phe Tyr Lys Val His Gln Leu Glu Gln Glu Ala Arg Arg

195	200	205
Asp Ala Leu Lys Gln Arg	Ala Glu Gln Ser Ile Ser	Glu Glu Pro Gly
210	215	220
Trp Glu Glu Glu Glu Glu	Leu Met Gly Ile Ser	Pro Ile Ser Pro
225	230	235
Lys Glu Ala Lys Val Pro	Val Ala Lys Ile Ser	Thr Phe Pro Glu Gly
245	250	255
Glu Pro Gly Pro Gln Ser	Pro Cys Glu Glu Asn	Leu Val Thr Ser Val
260	265	270
Glu Pro Pro Ala Glu Val	Thr Pro Ser Glu Ser	Ser Glu Ser Ile Ser
275	280	285
Leu Val Thr Gln Ile Ala	Asn Pro Ala Thr Ala	Pro Glu Ala Arg Val
290	295	300
Leu Pro Lys Asp Leu Ser	Gln Lys Leu Leu Glu	Ala Ser Leu Glu Glu
305	310	315
Gln Gly Leu Ala Val Asp	Val Gly Glu Thr Gly	Pro Ser Pro Pro Ile
325	330	335
His Ser Lys Pro Leu Thr	Pro Ala Gly His Thr	Gly Gly Pro Glu Pro
340	345	350
Arg Pro Pro Ala Arg Val	Glu Thr Leu Arg Glu	Glu Ala Pro Thr Asp
355	360	365
Leu Arg Val Phe Glu Leu	Asn Ser Asp Ser Gly	Lys Ser Thr Pro Ser
370	375	380
Asn Asn Gly Lys Lys Gly	Ser Ser Thr Asp Ile	Ser Glu Asp Trp Glu
385	390	395
Lys Asp Phe Asp Leu Asp	Met Thr Glu Glu Glu	Val Gln Met Ala Leu
405	410	415
Ser Lys Val Asp Ala Ser	Gly Glu Leu Lys Met	
420	425	

&lt;210&gt; 5471

&lt;211&gt; 534

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5471

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 420  
 gtggggggcag ccgggggacag ggctgggtgt gcgtgactcg ggtgtgccgg gaccacaga  
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<210> 5472  
 <211> 161  
 <212> PRT  
 <213> Homo sapiens

<400> 5472  
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 35 40 45  
 Phe Leu Cys Leu Cys Thr His Ala Gly Ala Gly Gly Ser Val His Thr  
 50 55 60  
 Pro Pro Arg Leu Arg Ala Arg Pro Tyr Met Pro Cys Ala Pro Thr Gln  
 65 70 75 80  
 Ala Gly Leu Gly Ser Leu His Ser Pro Leu Arg Val His Ser His Ile  
 85 90 95  
 Ala Thr His Ser Cys Pro His Lys Leu Val Ser Leu Tyr Ser Ala His  
 100 105 110  
 Gly His Thr Cys Ala Pro His Leu Ala Thr Arg Thr Pro Gly Leu Cys  
 115 120 125  
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 145 150 155 160  
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<210> 5473  
 <211> 691  
 <212> DNA  
 <213> Homo sapiens

<400> 5473  
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 480  
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<210> 5474

<211> 139

<212> PRT

<213> Homo sapiens

<400> 5474

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			20				25					30			
Ser	Pro	Ser	Pro	Gly	Ile	Arg	Ser	Ile	Met	Ser	Ser	Ala	Ile	Ala	Tyr
			35				40					45			
Leu	Cys	Gly	His	Leu	His	Thr	Leu	Gly	Gly	Leu	Met	Pro	Val	Leu	His
			50				55				60				
Thr	Arg	His	Phe	Gln	Gly	Thr	Leu	Glu	Leu	Glu	Val	Gly	Asp	Trp	Lys
65					70					75				80	
Asp	Asn	Arg	Arg	Tyr	Arg	Ile	Phe	Ala	Phe	Asp	His	Asp	Leu	Phe	Ser
					85					90				95	
Phe	Ala	Asp	Leu	Ile	Phe	Gly	Lys	Trp	Pro	Val	Val	Leu	Ile	Thr	Asn
			100				105					110			
Pro	Lys	Ser	Leu	Leu	Tyr	Ser	Cys	Gly	Glu	His	Glu	Pro	Leu	Glu	Arg
			115				120					125			
Leu	Leu	His	Ser	Thr	His	Ile	Arg	Leu	Val	Thr					
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<210> 5475

<211> 628

<212> DNA

<213> Homo sapiens

<400> 5475

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 aacaaccccc acgccagcta cagcgcccct ccgccagtga gctcctccga cagcgaggcc  
 180  
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 240  
 atggccgtca cagcggtaac cgccacagct gccacgaca ggatggagag cgactcagac  
 300  
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 gtctcgaaac gagcccgaaa ggcctccagc gacctggatc aggccagcgt gtcccatcc  
 420  
 gaagaggaga actcggaaaag ctcatctgag tcggagaaga ccagcgacca ggacttcaca  
 480

cctgagaaga aagcagcggc cggggcgcca cggagggggc ctctgggggg acggaaaaaa  
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 aagaaggcgc cgtcagcctc cgactccgac tccaaggccg attcggacgg ggccaagcct  
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<210> 5476  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 5476  
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 Asp Lys Cys Lys Asp Lys Tyr Gly Lys Pro Asn Lys Arg Lys Gly Phe  
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 Asn Glu Gly Leu Trp Glu Ile Gln Asn Asn Pro His Ala Ser Tyr Ser  
 35 40 45  
 Ala Pro Pro Pro Val Ser Ser Asp Ser Glu Ala Pro Glu Ala Asn  
 50 55 60  
 Pro Ala Asp Gly Ser Asp Ala Asp Glu Asp Asp Glu Asp Arg Gly Val  
 65 70 75 80  
 Met Ala Val Thr Ala Val Thr Ala Thr Ala Ala Ser Asp Arg Met Glu  
 85 90 95  
 Ser Asp Ser Asp Ser Asp Lys Ser Ser Asp Asn Ser Gly Leu Lys Arg  
 100 105 110  
 Lys Thr Pro Ala Leu Lys Met Ser Val Ser Lys Arg Ala Arg Lys Ala  
 115 120 125  
 Ser Ser Asp Leu Asp Gln Ala Ser Val Ser Pro Ser Glu Glu Glu Asn  
 130 135 140  
 Ser Glu Ser Ser Ser Glu Ser Glu Lys Thr Ser Asp Gln Asp Phe Thr  
 145 150 155 160  
 Pro Glu Lys Lys Ala Ala Val Arg Ala Pro Arg Arg Gly Pro Leu Gly  
 165 170 175  
 Gly Arg Lys Lys Lys Lys Ala Pro Ser Ala Ser Asp Ser Asp Ser Lys  
 180 185 190  
 Ala Asp Ser Asp Gly Ala Lys Pro Glu Pro Val Ala Met Ala Arg Ser  
 195 200 205  
 Ala

<210> 5477  
 <211> 727  
 <212> DNA  
 <213> Homo sapiens

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 180



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 720  
 gcggccg  
 727

<210> 5478  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens

<400> 5478  
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 20 25 30  
 Ala Pro Gly Gln Arg Gly Arg Lys Arg Trp Leu Leu Val Arg Leu Tyr  
 35 40 45  
 Lys Thr Trp Pro Leu Thr Cys Arg Pro Pro Thr Gln Leu Ala Gly Trp  
 50 55 60  
 Ala Gly Leu Ser Pro Leu Ala Ser Pro Gly Pro Leu Ala Gly Ser Ser  
 65 70 75 80  
 Thr Ser Leu Ser Ala Leu Ser Ala Arg Pro Pro Pro Asp Ser Ser Ser  
 85 90 95  
 Leu Ser Pro

<210> 5479  
 <211> 1386  
 <212> DNA  
 <213> Homo sapiens

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 120  
 atgcgagagg agcagctggc acgggaggcc gagggccggg cggagcggga ggcggaggcc  
 180

cggaggcggg aggagcagga ggcacgagag aaggcgcagg ccgagcagga ggagcaggag  
 240  
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 720  
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 780  
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&lt;210&gt; 5480

&lt;211&gt; 251

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5480

Ala	Gly	Thr	Thr	Asp	Arg	Glu	Glu	Ala	Thr	Arg	Leu	Leu	Ala	Glu	Lys
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Arg	Arg	Gln	Ala	Arg	Glu	Gln	Arg	Glu	Arg	Glu	Glu	Gln	Glu	Arg	Arg
			20				25						30		
Leu	Gln	Ala	Glu	Arg	Asp	Lys	Arg	Met	Arg	Glu	Glu	Gln	Leu	Ala	Arg

35 40 45  
 Glu Ala Glu Ala Arg Ala Glu Arg Glu Ala Glu Ala Arg Arg Arg Glu  
 50 55 60  
 Glu Gln Glu Ala Arg Glu Lys Ala Gln Ala Glu Gln Glu Gln Glu  
 65 70 75 80  
 Arg Leu Gln Lys Gln Lys Glu Glu Ala Glu Ala Arg Ser Arg Glu Glu  
 85 90 95  
 Ala Glu Arg Gln Arg Leu Glu Arg Glu Lys His Phe Gln Gln Gln Glu  
 100 105 110  
 Gln Glu Arg Gln Glu Arg Arg Lys Arg Leu Glu Glu Ile Met Lys Arg  
 115 120 125  
 Thr Arg Lys Ser Glu Val Ser Glu Thr Lys Gln Lys Gln Asp Ser Lys  
 130 135 140  
 Glu Ala Asn Ala Asn Gly Ser Ser Pro Glu Pro Val Lys Ala Val Glu  
 145 150 155 160  
 Ala Arg Ser Pro Gly Leu Gln Lys Glu Ala Val Gln Lys Glu Glu Pro  
 165 170 175  
 Ile Pro Gln Glu Pro Gln Trp Ser Leu Pro Ser Lys Glu Leu Pro Ala  
 180 185 190  
 Ser Leu Val Asn Gly Leu Gln Pro Leu Pro Ala His Gln Glu Asn Gly  
 195 200 205  
 Phe Ser Thr Asn Gly Pro Ser Gly Asp Lys Ser Leu Ser Arg Thr Pro  
 210 215 220  
 Glu Thr Leu Leu Pro Phe Ala Glu Ala Glu Ala Phe Leu Lys Lys Ala  
 225 230 235 240  
 Val Val Gln Ser Pro Gln Val Thr Glu Val Leu  
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<210> 5481  
 <211> 1513  
 <212> DNA  
 <213> Homo sapiens

<400> 5481  
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 480  
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 540  
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 600

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 720  
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 780  
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&lt;210&gt; 5482

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5482

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Phe	Leu	Tyr	Phe	Ala	Tyr	Gly	Ser	Asn	Leu	Leu	Thr	Glu	Arg	Ile	His
		20					25						30		
Leu	Arg	Asn	Pro	Ser	Ala	Ala	Phe	Cys	Val	Ala	Arg	Leu	Gln	Asp	
		35				40					45				
Phe	Lys	Leu	Asp	Phe	Gly	Asn	Ser	Gln	Gly	Lys	Thr	Ser	Gln	Thr	Trp
50					55				60						
His	Gly	Gly	Ile	Ala	Thr	Ile	Phe	Gln	Ser	Pro	Gly	Asp	Glu	Leu	Trp
65				70				75					80		
Gly	Val	Val	Trp	Lys	Met	Asn	Lys	Ser	Asn	Leu	Asn	Ser	Leu	Asp	Glu
				85				90					95		
Gln	Glu	Gly	Val	Lys	Ser	Gly	Met	Tyr	Val	Val	Ile	Glu	Val	Lys	Val
			100				105					110			
Ala	Thr	Gln	Glu	Gly	Lys	Glu	Ile	Thr	Cys	Arg	Ser	Tyr	Leu	Met	Thr

	115		120		125	
Asn	Tyr	Glu	Ser	Ala	Pro	Pro
	130		135		140	
Met	Gly	Ala	Lys	Glu	Asn	Gly
145			150		155	
Lys	Ala	Ile	Glu	Pro	Asn	Asp
	165		170		175	
Glu	Asp	Ile	Ile	Lys	Lys	Gly
	180		185			

&lt;210&gt; 5483

&lt;211&gt; 1552

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5483

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1140

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 1380  
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<210> 5484

<211> 357

<212> PRT

<213> Homo sapiens

<400> 5484

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		20					25					30			
Ile	Asp	Ile	Ile	Asn	Leu	Asp	Thr	Phe	Thr	Tyr	Ile	Glu	Ser	Ala	Ser
	35					40					45				
Glu	Leu	Arg	Gly	Gly	Phe	Asp	Trp	Ser	Leu	His	Phe	Gln	Trp	Glu	Gln
	50				55					60					
Leu	Ser	Pro	Glu	Gln	Lys	Ala	Arg	Arg	Leu	Asp	Pro	Thr	Glu	Pro	Ile
65				70				75						80	
Arg	Thr	Pro	Ile	Ile	Ala	Gly	Gly	Leu	Phe	Val	Ile	Asp	Lys	Ala	Trp
		85						90					95		
Phe	Asp	Tyr	Leu	Gly	Lys	Tyr	Asp	Met	Asp	Met	Asp	Ile	Trp	Gly	Gly
		100					105					110			
Glu	Asn	Phe	Glu	Ile	Ser	Phe	Arg	Val	Trp	Met	Cys	Gly	Gly	Ser	Leu
	115					120					125				
Glu	Ile	Val	Pro	Cys	Ser	Arg	Val	Gly	His	Val	Phe	Arg	Lys	Lys	His
	130					135				140					
Pro	Tyr	Val	Phe	Pro	Asp	Gly	Asn	Ala	Asn	Thr	Tyr	Ile	Lys	Asn	Thr
145				150					155					160	
Lys	Arg	Thr	Ala	Glu	Val	Trp	Met	Asp	Glu	Tyr	Lys	Gln	Tyr	Tyr	Tyr
		165						170					175		
Ala	Ala	Arg	Pro	Phe	Ala	Leu	Glu	Arg	Pro	Phe	Gly	Asn	Val	Glu	Ser
	180					185						190			
Arg	Leu	Asp	Leu	Arg	Lys	Asn	Leu	Arg	Cys	Gln	Ser	Phe	Lys	Trp	Tyr
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	260		265		270										
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	275			280							285				
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Leu	Cys	Leu	Asp	Thr	Asp	Met	Phe	Gly	Asp	Gly	Thr	Glu	Asn	Gly	Lys
			325						330					335	
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&lt;210&gt; 5485

&lt;211&gt; 1549

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5485

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<211> 290

<212> PRT

<213> Homo sapiens

<400> 5486

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			20					25					30		
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		35				40					45				
Val	Ser	Ser	Arg	Phe	Ser	Ser	Arg	Ser	Arg	Arg	Ser	Lys	Ser	Arg	Ser
	50				55					60					
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65					70				75					80	
Tyr	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Arg	Tyr	Arg	Glu	Arg
			85					90					95		
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			100					105					110		
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	115					120						125			
Arg	Ala	Tyr	Ala	Ile	Ala	Arg	Gly	Gln	Arg	Tyr	Tyr	Gly	Phe	Gly	Arg
	130					135						140			
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Arg	Ser	Arg	Ser	Arg	Thr	Pro	Phe	Arg	Leu	Ser	Glu	Lys	Asp	Arg	Met
			165					170					175		
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	195					200						205			
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	210					215					220				
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		245		250		255									
Lys	Pro	Ile	Gln	Lys	Ser	Ala	Lys	Ala	Ala	Thr	Glu	Glu	Ala	Ser	Ser
		260		265		270									
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&lt;211&gt; 1716

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5487

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<211> 272

<212> PRT

<213> Homo sapiens

<400> 5488

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			20					25					30		
Gly	Phe	Trp	Arg	Pro	Leu	Arg	Gly	Val	Asn	Val	Met	Ile	Met	Gly	Ala
		35					40					45			
Gly	Pro	Ala	His	Ala	Met	Tyr	Phe	Ala	Cys	Tyr	Glu	Asn	Met	Lys	Arg
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Thr	Leu	Asn	Asp	Val	Phe	His	His	Gln	Gly	Asn	Ser	His	Leu	Ala	Asn
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Gly	Ile	Ala	Gly	Ser	Met	Ala	Thr	Leu	Leu	His	Asp	Ala	Val	Met	Asn
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Pro	Ala	Glu	Val	Val	Lys	Gln	Arg	Leu	Gln	Met	Tyr	Asn	Ser	Gln	His
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Arg	Ser	Ala	Ile	Ser	Cys	Ile	Arg	Thr	Val	Trp	Arg	Thr	Glu	Gly	Leu
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Asn	Pro	His	Arg	Thr	Tyr	Asn	Pro	Gln	Ser	His	Ile	Ile	Ser	Gly	Gly
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Leu	Ala	Gly	Ala	Leu	Ala	Ala	Ala	Ala	Thr	Thr	Pro	Leu	Asp	Val	Cys
		180						185				190			
Lys	Thr	Leu	Leu	Asn	Thr	Gln	Glu	Asn	Val	Ala	Leu	Ser	Leu	Ala	Asn
		195				200					205				
Ile	Ser	Gly	Arg	Leu	Ser	Gly	Met	Ala	Asn	Ala	Phe	Arg	Thr	Val	Tyr

210		215		220	
Gln Leu Asn Gly Leu Ala Gly Tyr Phe Lys Gly Ile Gln Ala Arg Val					
225		230		235	240
Ile Tyr Gln Met Pro Ser Thr Ala Ile Ser Trp Ser Val Tyr Glu Phe					
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 <211> 1600  
 <212> DNA  
 <213> Homo sapiens

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<211> 357

<212> PRT

<213> Homo sapiens

<400> 5490

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		35					40					45			
Gly	Ile	Ile	Phe	Thr	Arg	Thr	Arg	Gln	Ser	Ala	His	Ser	Leu	Leu	Leu
	50					55				60					
Trp	Leu	Gln	Gln	Gln	Gln	Gly	Leu	Gln	Thr	Val	Asp	Ile	Arg	Ala	Gln
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			85						90				95		
Arg	Asp	Gln	Gln	Glu	Val	Ile	Gln	Lys	Phe	Gln	Asp	Gly	Thr	Leu	Asn
		100					105					110			
Leu	Leu	Val	Ala	Thr	Ser	Val	Ala	Glu	Glu	Gly	Leu	Asp	Ile	Pro	His
		115					120				125				
Cys	Asn	Val	Val	Val	Arg	Tyr	Gly	Leu	Leu	Thr	Asn	Glu	Ile	Ser	Met
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			165					170					175		
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	210				215					220					
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Ile	Ser	Cys	Arg	Asn	Cys	Gly	Glu	Val	Trp	Gly	Leu	Gln	Met	Ile	Tyr
	290					295					300				
Lys	Ser	Val	Lys	Leu	Pro	Val	Leu	Lys	Val	Arg	Ser	Met	Leu	Leu	Glu
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Thr	Pro	Gln	Gly	Arg	Ile	Gln	Ala	Lys	Lys	Trp	Ser	Arg	Val	Pro	Phe
			325						330				335		
Ser	Val	Pro	Asp	Phe	Asp	Phe	Leu	Gln	His	Cys	Ala	Glu	Asn	Leu	Ser
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&lt;210&gt; 5491

&lt;211&gt; 5555

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5491

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Ile Asp Ser Asn Ile Ala Phe Ser Val Asn Ala Ser Asp Lys Gly Glu
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Ala Ser Cys Cys Asp Pro Val Ser Ala Ala Phe Glu Gly Cys Leu Arg
          325          330          335
Arg Leu Phe Thr Arg Trp Gly Ser Phe Cys Val Arg Asn Pro Gly Cys
          340          345          350
Val Ile Phe Phe Ser Leu Val Phe Ile Thr Ala Cys Ser Ser Gly Leu
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Val Phe Val Arg Val Thr Thr Asn Pro Val Asp Leu Trp Ser Ala Pro
          370          375          380
Ser Ser Gln Ala Arg Leu Glu Lys Glu Tyr Phe Asp Gln His Phe Gly
385          390          395          400
Pro Phe Phe Arg Thr Glu Gln Leu Ile Ile Arg Ala Pro Leu Thr Asp
          405          410          415
Lys His Ile Tyr Gln Pro Tyr Pro Ser Gly Ala Asp Val Pro Phe Gly
          420          425          430
Pro Pro Leu Asp Ile Gln Ile Leu His Gln Val Leu Asp Leu Gln Ile
          435          440          445
Ala Ile Glu Asn Ile Thr Ala Ser Tyr Asp Asn Glu Thr Val Thr Leu
          450          455          460
Gln Asp Ile Cys Leu Ala Pro Leu Ser Pro Tyr Asn Thr Asn Cys Thr
465          470          475          480
Ile Leu Ser Val Leu Asn Tyr Phe Gln Asn Ser His Ser Val Leu Asp
          485          490          495
His Lys Lys Gly Asp Asp Phe Phe Val Tyr Ala Asp Tyr His Thr His
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Phe Leu Tyr Cys Val Arg Ala Pro Ala Ser Leu Asn Asp Thr Ser Leu
          515          520          525
Leu His Asp Pro Cys Leu Gly Thr Phe Gly Gly Pro Val Phe Pro Trp
          530          535          540
Leu Val Leu Gly Gly Tyr Asp Asp Gln Asn Tyr Asn Asn Ala Thr Ala
545          550          555          560
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4674



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Lys Ala Arg Leu Ile Ala Ser Asn Val Thr Glu Thr Met Gly Ile Asn
      1060              1065              1070
Gly Ser Ala Tyr Arg Val Phe Pro Tyr Ser Val Phe Tyr Val Phe Tyr
      1075              1080              1085
Glu Gln Tyr Leu Thr Ile Ile Asp Asp Thr Ile Phe Asn Leu Gly Val
      1090              1095              1100
Ser Leu Gly Ala Ile Phe Leu Val Thr Met Val Leu Leu Gly Cys Glu
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      1125              1130              1135
Asn Met Phe Gly Val Met Trp Leu Trp Gly Ile Ser Leu Asn Ala Val
      1140              1145              1150
Ser Leu Val Asn Leu Val Met Ser Cys Gly Ile Ser Val Glu Phe Cys
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Glu Arg Ala Glu Glu Ala Leu Ala His Met Gly Ser Ser Val Phe Ser
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Gly Ile Thr Leu Thr Lys Phe Gly Gly Ile Val Val Leu Ala Phe Ala
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Lys Ser Gln Ile Phe Gln Ile Phe Tyr Phe Arg Met Tyr Leu Ala Met
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Val Leu Leu Gly Ala Thr His Gly Leu Ile Phe Leu Pro Val Leu Leu
      1235              1240              1245
Ser Tyr Ile Gly Pro Ser Val Asn Lys Ala Lys Ser Cys Ala Thr Glu
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Glu Arg Tyr Lys Gly Thr Glu Arg Glu Arg Leu Leu Asn Phe
1265              1270              1275

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&lt;210&gt; 5495

&lt;211&gt; 2414

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5495

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<211> 345

<212> PRT

<213> Homo sapiens

<400> 5496

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				85					90					95	
Tyr	Gln	Cys	Pro	Asp	Gln	Met	Ala	Arg	Asn	Pro	Ala	Ala	Ile	Asp	Met
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Tyr	Val	His	Asp	Pro	Glu	Cys	Val	Ala	Thr	Thr	Gly	Asp	Ile	Thr	Val
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Ser	Val	Ser	Thr	Ser	Phe	Leu	Pro	Glu	Leu	Ser	Ser	Val	His	Pro	Pro
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His	Tyr	Phe	Phe	Thr	Tyr	Arg	Ile	Arg	Ile	Glu	Met	Ser	Lys	Asp	Ala
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Leu	Pro	Glu	Lys	Ala	Cys	Gln	Leu	Asp	Ser	Arg	Tyr	Trp	Arg	Ile	Thr
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Asn	Ala	Lys	Gly	Asp	Val	Glu	Glu	Val	Gln	Gly	Pro	Gly	Val	Val	Gly
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Glu	Phe	Pro	Ile	Ile	Ser	Pro	Gly	Arg	Val	Tyr	Glu	Tyr	Thr	Ser	Cys
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Thr	Thr	Phe	Ser	Thr	Thr	Ser	Gly	Tyr	Met	Glu	Gly	Tyr	Tyr	Thr	Phe
				245					250					255	
His	Phe	Leu	Tyr	Phe	Lys	Asp	Lys	Ile	Phe	Asn	Val	Ala	Ile	Pro	Arg

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Phe	His	Met	Ala	Cys	Pro	Thr	Phe	Arg	Val	Ser	Ile	Ala	Arg	Leu	Glu
	275		280		285										
Met	Gly	Pro	Asp	Glu	Tyr	Glu	Glu	Met	Glu	Glu	Glu	Glu	Glu	Glu	Glu
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Glu	Glu	Glu	Asp	Glu	Asp	Asp	Asp	Ser	Ala	Asp	Met	Asp	Glu	Ser	Asp
305			310		315									320	
Glu	Asp	Asp	Glu	Glu	Glu	Arg	Arg	Arg	Arg	Val	Phe	Asp	Val	Pro	Ile
		325			330									335	
Arg	Arg	Arg	Arg	Cys	Ser	Arg	Leu	Phe							
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&lt;210&gt; 5497

&lt;211&gt; 1056

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5497

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 960  
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 <211> 150  
 <212> PRT  
 <213> Homo sapiens

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                   20                  25                  30  
 Ala Gln Leu Trp Trp Ser Ser Pro Phe Ile His Ser Pro Gly Glu Thr  
                   35                  40                  45  
 Asn Ile Pro His Thr Leu Thr Glu Pro His Ser Val Pro Gly Trp Cys  
   50                  55                  60  
 Trp Asp Thr Leu Arg Arg His Gly Ala Gly Gln Gly His Pro Gly Met  
   65                  70                  75                  80  
 Ala Arg Ser Gly Thr Gly Glu Gly Gln Arg Glu Gly Asp Ile Glu Arg  
                   85                  90                  95  
 Glu Glu Asp Glu Glu Glu Gly Asn Arg Ser Arg Lys Ser Arg Asp Ser  
                   100                  105                  110  
 Arg Ser Gln Val Lys Gly Leu Pro Leu His Ser Arg Glu Gln Arg Asp  
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<210> 5499  
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 <212> DNA  
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 1918

&lt;210&gt; 5500

&lt;211&gt; 426

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5500

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<210> 5501  
<211> 568

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5501

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 568

&lt;210&gt; 5502

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5502

Met	Ile	Leu	Gly	Lys	Arg	Leu	His	Leu	Asn	Phe	Arg	Tyr	Phe	Thr	Cys
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Glu	Ala	Gly	Thr	Lys	Pro	Cys	Ser	Ser	Glu	Val	Pro	Val	Gly	Ala	Gly
			20				25						30		
Gly	Ala	Ala	Leu	Gln	Val	Leu	Ala	His	Ala	Gln	Gln	Ala	Pro	His	Ser
			35				40					45			
Phe	Val	Thr	Thr	Lys	Gly	Thr	Val	Leu	Phe	Thr	Ala	Pro	Pro	Ala	Ser
	50					55					60				
Ala	Trp	Gln	Leu	Cys	Leu	Pro	Val	Leu	Tyr	Leu	Ile	Pro	Pro	Ala	Lys
65				70					75					80	
Leu	Ala	Arg	Gln	Gly	Pro	Ala	Leu	Lys	Glu	Ile	Ser	Leu	Pro	Asp	Pro
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Trp	Thr	Trp	Lys	Trp	Arg	Leu	His	Val	Pro	Ala	Leu	Ala	Ala		
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&lt;210&gt; 5503

&lt;211&gt; 1679

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5503

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1200  
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1260  
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1320  
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1380  
cctgtccaca ccccccaact gatgccactg ctgatggatg ttgctggcag tgacagcagc  
1440  
cacaaggacg gccctgtgg gtcctggggg acaaggtaag gaacctacgg gggtaggtca  
1500  
ctctagttat ctgggtgggg gtaggggggt gtagatggag agaagataga cacagagagg  
1560  
agagggttaa ctgagaggag cacagagtgg tacaggagat ggggatgaaa gggataaggg  
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1679

<210> 5504  
 <211> 392  
 <212> PRT  
 <213> Homo sapiens

<400> 5504

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Gln Lys Ala Gly Glu Lys Pro Leu Ala Ala Gly Pro Gly Glu Glu Glu
 1          5          10          15
Leu Leu Arg Gly Ser Ala Pro His Ala Gln Asp Thr Gln Ser Glu Glu
 20          25          30
Leu Pro Pro Ser Cys Thr Ile Ser Gly Glu Lys Lys Pro Pro Ala Val
 35          40          45
Ser Gly Glu Ala Thr Gly Ala Asp Ala Gly Arg Leu Cys Pro Pro Pro
 50          55          60
Arg Ser Arg Ala Pro His Lys Asp Arg Thr Leu Ala Arg Ser Arg Pro
 65          70          75          80
Gln Thr Gln Gly Glu Asp Cys Ser Leu Pro Val Gly Glu Val Lys Ile
 85          90          95
Gly Lys Arg Ser Tyr Ser Pro Ala Pro Gly Lys Gln Lys Lys Pro Asn
 100         105         110
Ala Met Gly Leu Ala Pro Thr Ser Ser Pro Gly Ala Pro Asn Ser Ala
 115         120         125
Arg Ala Thr His Asn Pro Val Pro Cys Gly Ser Gly Arg Gly Pro Cys
 130         135         140
His Leu Ala Asn Leu Leu Ser Thr Leu Ala Gln Ser Asn Gln Asn Arg
 145         150         155         160
Asp His Lys Gln Gly Pro Pro Glu Val Thr Cys Gln Ile Arg Lys Lys
 165         170         175
Thr Arg Thr Leu Tyr Arg Ser Asp Gln Leu Glu Glu Leu Glu Lys Ile
 180         185         190
Phe Gln Glu Asp His Tyr Pro Asp Ser Asp Lys Arg Arg Glu Ile Ala
 195         200         205
Gln Thr Val Gly Val Thr Pro Gln Arg Ile Met Val Lys Gly Ala Gly
 210         215         220
Ser Leu Val Ala Gly Trp Ser Gly Gly Gly Pro Thr Ile Glu Thr Leu
 225         230         235         240
Glu Leu Gln Ser Glu Arg Ser Ala Val Ala Trp Val Trp Phe Gln Asn
 245         250         255
Arg Arg Ala Lys Trp Arg Lys Met Glu Lys Leu Asn Gly Lys Glu Ser
 260         265         270
Lys Asp Asn Pro Ala Ala Pro Gly Pro Ala Ser Ser Gln Cys Ser Ser
 275         280         285
Ala Ala Glu Ile Leu Pro Ala Val Pro Met Glu Pro Lys Pro Asp Pro
 290         295         300
Phe Pro Gln Glu Ser Pro Leu Asp Thr Phe Pro Glu Pro Pro Met Leu
 305         310         315         320
Leu Thr Ser Asp Gln Thr Leu Ala Pro Thr Gln Pro Ser Glu Gly Ala
 325         330         335
Gln Arg Val Val Thr Pro Pro Leu Phe Ser Pro Pro Pro Val Arg Arg
 340         345         350
Ala Asp Leu Pro Phe Pro Leu Gly Pro Val His Thr Pro Gln Leu Met
 355         360         365
Pro Leu Leu Met Asp Val Ala Gly Ser Asp Ser Ser His Lys Asp Gly

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370  
Pro Cys Gly Ser Trp Gly Thr Arg  
385 390

380

<210> 5505  
<211> 1099  
<212> DNA  
<213> Homo sapiens

<400> 5505  
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120  
gagctgttca cgcacgtgcc cgcccgccag ctgctgctga actgccgcct ggtctgcagc  
180  
ctctggcggg acctcatcga cctcgtgacc ctctggaaac gcaagtgcct gcgagagggc  
240  
ttcatcactg aggactggga ccagcccgtg gccgactgga agatcttcta cttcttacgg  
300  
agcctgcaca ggaacctcct gcacaaccgc tgcgtgaag aggggttcga gttctggagc  
360  
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420  
gaattcccca atgaccaggt caagaaatac ttcgttactt catattacac ctgcctcaag  
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540  
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600  
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660  
gagaccatcc agcagaagag cgatgccaag tggagggagg tctccacac attctccaac  
720  
taccgccccg gcgtccgcta catctggttt cagcacggcg gcgtggacac tcattactgg  
780  
gccggctggg acggcccgag ggtcaccaac agcagcatca ccatcgggccc ccgctgccc  
840  
tgacaccccc tgagcccca tctgctgaac cctgactggg aaacaactgc tgtcagaaaa  
900  
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960  
ctagcagcct cttctttgtg gagcctctca gtgtgggcag cctcgcctg ctggggctgg  
1020  
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1080  
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1099

<210> 5506  
<211> 280  
<212> PRT  
<213> Homo sapiens

&lt;400&gt; 5506

Lys Leu Gly Arg Pro Ser Gly Ser Cys Arg Gly Gly Arg Ala Gln Leu  
 1 5 10 15  
 Gln Glu Gly Val Gln Lys Pro Gln Ala Met Ala Val Gly Asn Ile Asn  
 20 25 30  
 Glu Leu Pro Glu Asn Ile Leu Leu Glu Leu Phe Thr His Val Pro Ala  
 35 40 45  
 Arg Gln Leu Leu Leu Asn Cys Arg Leu Val Cys Ser Leu Trp Arg Asp  
 50 55 60  
 Leu Ile Asp Leu Val Thr Leu Trp Lys Arg Lys Cys Leu Arg Glu Gly  
 65 70 75 80  
 Phe Ile Thr Glu Asp Trp Asp Gln Pro Val Ala Asp Trp Lys Ile Phe  
 85 90 95  
 Tyr Phe Leu Arg Ser Leu His Arg Asn Leu Leu His Asn Pro Cys Ala  
 100 105 110  
 Glu Glu Gly Phe Glu Phe Trp Ser Leu Asp Val Asn Gly Gly Asp Glu  
 115 120 125  
 Trp Lys Val Glu Asp Leu Ser Arg Asp Gln Arg Lys Glu Phe Pro Asn  
 130 135 140  
 Asp Gln Val Lys Lys Tyr Phe Val Thr Ser Tyr Tyr Thr Cys Leu Lys  
 145 150 155 160  
 Ser Gln Val Val Asp Leu Lys Ala Glu Gly Tyr Trp Glu Glu Leu Leu  
 165 170 175  
 Asp Thr Phe Arg Pro Asp Ile Val Val Lys Asp Trp Phe Ala Ala Arg  
 180 185 190  
 Ala Asp Cys Gly Cys Thr Tyr Gln Leu Lys Val Gln Leu Leu Ser Ala  
 195 200 205  
 Asp Tyr Phe Val Leu Ala Ser Phe Glu Pro Asp Pro Ala Thr Ile Gln  
 210 215 220  
 Gln Lys Ser Asp Ala Lys Trp Arg Glu Val Ser His Thr Phe Ser Asn  
 225 230 235 240  
 Tyr Pro Pro Gly Val Arg Tyr Ile Trp Phe Gln His Gly Gly Val Asp  
 245 250 255  
 Thr His Tyr Trp Ala Gly Trp Tyr Gly Pro Arg Val Thr Asn Ser Ser  
 260 265 270  
 Ile Thr Ile Gly Pro Pro Leu Pro  
 275 280

&lt;210&gt; 5507

&lt;211&gt; 1658

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5507

nttagaaa gccaaaggaat tgagttaaatt ccaccagaga agatggctct tgatccttac  
 60  
 actgaactcc gaaaacagcc tcttcgtaag tatgtcacc catcagaactt tgatcaactc  
 120  
 aagcaatttc tcaccttga caaacagggtc cttcgattct atgcaatctg ggatgataca  
 180  
 gacagcatgt atgggtgaatg tcggacctac atcattcatt actatcttat ggatgatacg  
 240  
 gtggaaattc gagaggtcca cgaacggaat gatgggagag atcctttccc actcctaagt  
 300

aaccgccagc gtgtgcccaa agttttggtg gaaaatgcaa agaacttccc tcagtgtgtg  
360  
ctagaaatct ctgaccaaga agtggttgaa tggatactg ctaaagactt cattgttggg  
420  
aagtcactca ctatccttgg gagaactttc ttcatttatg attgtgatcc atttactcga  
480  
cggattaca aagagaagtt tggaatcact gatttaccac gtattgatgt gagcaagcgg  
540  
gaaccacctc cagtaaaaca ggagttgcct ccttataacg gttttggact agtgggaagat  
600  
tctgctcaga attgttttgc tctcattcca aaagctccaa aaaaagacgt tattaaaatg  
660  
ctggtgaatg ataacaaggt gcttcgttat ttggctgtac tggaaatccc catcccagaa  
720  
gacaaagacc gcagatttgt cttctcttac tttctagcta ccgacatgat cagtatcttt  
780  
gagcctcctg ttcgcaattc tggatcatt gggggcaagt accttggcag gactaaagtt  
840  
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900  
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960  
ttgaaataca tggagagcaa cgctgccag tattcaccag aagcactcgc gtcaattcag  
1020  
aaccatgtcc gaaagcgaga agcgctgct ccagaagcag aaagcaagca aactgaaaag  
1080  
gatccaggcg tgcaggaatt ggaagcatta atagacacaa ttcagaagca actgaaagat  
1140  
cactcatgca aagacaacat tcgtgaggca tttcaaattt atgacaagga agcttcagga  
1200  
tatgtggaca gagacatgtt ctttaaaatc tgtgaatcgc ttaacgtccc agtggatgac  
1260  
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1320  
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1380  
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1560  
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1620  
aaaaaataaa ttttttttga gatgggaaaa aaaaaaaa  
1658

&lt;210&gt; 5508

&lt;211&gt; 448

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5508

Xaa Leu Glu Ser Gln Gly Ile Glu Leu Asn Pro Pro Glu Lys Met Ala

1	5	10	15
Leu Asp Pro Tyr Thr Glu Leu Arg Lys Gln Pro Leu Arg Lys Tyr Val			
20	25	30	
Thr Pro Ser Asp Phe Asp Gln Leu Lys Gln Phe Leu Thr Phe Asp Lys			
35	40	45	
Gln Val Leu Arg Phe Tyr Ala Ile Trp Asp Asp Thr Asp Ser Met Tyr			
50	55	60	
Gly Glu Cys Arg Thr Tyr Ile Ile His Tyr Tyr Leu Met Asp Asp Thr			
65	70	75	80
Val Glu Ile Arg Glu Val His Glu Arg Asn Asp Gly Arg Asp Pro Phe			
85	90	95	
Pro Leu Leu Met Asn Arg Gln Arg Val Pro Lys Val Leu Val Glu Asn			
100	105	110	
Ala Lys Asn Phe Pro Gln Cys Val Leu Glu Ile Ser Asp Gln Glu Val			
115	120	125	
Leu Glu Trp Tyr Thr Ala Lys Asp Phe Ile Val Gly Lys Ser Leu Thr			
130	135	140	
Ile Leu Gly Arg Thr Phe Phe Ile Tyr Asp Cys Asp Pro Phe Thr Arg			
145	150	155	160
Arg Tyr Tyr Lys Glu Lys Phe Gly Ile Thr Asp Leu Pro Arg Ile Asp			
165	170	175	
Val Ser Lys Arg Glu Pro Pro Pro Val Lys Gln Glu Leu Pro Pro Tyr			
180	185	190	
Asn Gly Phe Gly Leu Val Glu Asp Ser Ala Gln Asn Cys Phe Ala Leu			
195	200	205	
Ile Pro Lys Ala Pro Lys Lys Asp Val Ile Lys Met Leu Val Asn Asp			
210	215	220	
Asn Lys Val Leu Arg Tyr Leu Ala Val Leu Glu Ser Pro Ile Pro Glu			
225	230	235	240
Asp Lys Asp Arg Arg Phe Val Phe Ser Tyr Phe Leu Ala Thr Asp Met			
245	250	255	
Ile Ser Ile Phe Glu Pro Pro Val Arg Asn Ser Gly Ile Ile Gly Gly			
260	265	270	
Lys Tyr Leu Gly Arg Thr Lys Val Val Lys Pro Tyr Ser Thr Val Asp			
275	280	285	
Asn Pro Val Tyr Tyr Gly Pro Ser Asp Phe Phe Ile Gly Ala Val Ile			
290	295	300	
Glu Val Phe Gly His Arg Phe Ile Ile Leu Asp Thr Asp Glu Tyr Val			
305	310	315	320
Leu Lys Tyr Met Glu Ser Asn Ala Ala Gln Tyr Ser Pro Glu Ala Leu			
325	330	335	
Ala Ser Ile Gln Asn His Val Arg Lys Arg Glu Ala Pro Ala Pro Glu			
340	345	350	
Ala Glu Ser Lys Gln Thr Glu Lys Asp Pro Gly Val Gln Glu Leu Glu			
355	360	365	
Ala Leu Ile Asp Thr Ile Gln Lys Gln Leu Lys Asp His Ser Cys Lys			
370	375	380	
Asp Asn Ile Arg Glu Ala Phe Gln Ile Tyr Asp Lys Glu Ala Ser Gly			
385	390	395	400
Tyr Val Asp Arg Asp Met Phe Phe Lys Ile Cys Glu Ser Leu Asn Val			
405	410	415	
Pro Val Asp Asp Ser Leu Val Lys Glu Leu Ile Arg Met Cys Ser His			
420	425	430	
Gly Glu Gly Lys Ile Asn Tyr Tyr Asn Phe Val Arg Ala Phe Ser Asn			

435

440

445

&lt;210&gt; 5509

&lt;211&gt; 818

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5509

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60
aaggagagct gtatttgtgt ttcattggtt ctttaccaaa taattctagc atcggaattg
120
ctatgtgaga ggaagtaagt atacacagcg taagaggtgt gataaccaag tcatagaaga
180
aatgttttga gaacatggaa tcatgtgaac ttattatgtg gtaagtacag ataccaggg
240
ctgtcagtct caccatcctt ttctacacat gtggatgctt caggactcca gcctttgagg
300
atgtggcttt caacttcacc ctacaggaaa ggtagtcaat gtggagaagc cttcagccag
360
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420
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480
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540
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600
aacctctatg aatgttagga atttcagaaa acattcactt ccccccaaaa ctttcaaaga
660
tgtgaaaatg catagtggag atggacctta caaatgcaag gtgggtagga aaacctttga
720
ctctcccagt tcatttcgaa tacatggaag atctcattct ggagagaaaac ccaatgtgtg
780
taggcactgt gggagcacct acaatcattt cagttttg
818

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&lt;210&gt; 5510

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5510

```

Met Trp Leu Ser Thr Ser Pro Tyr Arg Lys Gly Ser Gln Cys Gly Glu
1          5          10          15
Ala Phe Ser Gln Ile Pro Gly His Asn Leu Asn Lys Lys Thr Pro Pro
20          25          30
Gly Val Lys Pro Pro Glu Ser His Val Cys Gly Glu Val Gly Val Gly
35          40          45
Tyr Pro Ser Thr Glu Arg His Ile Arg Asp Arg Leu Gly Arg Lys Pro
50          55          60
Cys Glu Tyr Gln Glu Cys Arg Gln Lys Ala Tyr Thr Cys Lys Pro Cys
65          70          75          80
Gly Asn Ala Phe Arg Phe His His Ser Phe His Ile His Glu Arg Pro

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85 90 95  
 His Ser Gly Glu Asn Leu Tyr Glu Cys  
 100 105

<210> 5511  
 <211> 379  
 <212> DNA  
 <213> Homo sapiens

<400> 5511  
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 ccttccttgg gaaaagaggg catcgtctca atcgcatagt cacacacatc ccttaactca  
 120  
 ctctgctgag ttgctgagag tctgtgttcc tctctccact tataggatgg gtcctcatct  
 180  
 tcttgagctt caagcccaa ggcagagacc tggtgtctcc tcatgggagc ctcagggata  
 240  
 atgctgaatt cctctatggc agagatggga ggagaggctc cacgctgggc ctcctcagcc  
 300  
 tccatcaggg ctgaatcctg gtcggtgtca catgtgtctt cggtcccagc gtcccctcca  
 360  
 ggtcccggcg ccggccgcn  
 379

<210> 5512  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

<400> 5512  
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 Ile Glu Glu Phe Ser Ile Ile Pro Glu Ala Pro Met Arg Ser Ser Gln  
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 Val Ser Ala Leu Gly Leu Glu Ala Gln Glu Asp Glu Asp Pro Ser Tyr  
 35 40 45  
 Lys Trp Arg Glu Glu His Arg Leu Ser Ala Thr Gln Gln Ser Glu Leu  
 50 55 60  
 Arg Asp Val Cys Asp Tyr Ala Ile Glu Thr Met Pro Ser Phe Pro Lys  
 65 70 75 80  
 Glu Gly Ser Ala Asp Val Glu Pro Asn Gln Glu Ser Leu Val Ala Glu  
 85 90 95  
 Ala Cys Asp Thr Pro  
 100

<210> 5513  
 <211> 837  
 <212> DNA  
 <213> Homo sapiens

<400> 5513  
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 60



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120  
agactcgggg agccattgac catcgtctct gaggatggag actggtggac ggtgctgtct  
180  
gaagtctcag gcagagagta taacatcccc agcgtccacg tggccaaagt ctcccatggg  
240  
tggctgtatg agggcctgag cagggagaaa gcagaggacc tgctgttggt acctgggaac  
300  
cctggagggg ccttcctcat ccgggagagc cagaccagga gaggtcttta ctctctgtca  
360  
gtccgcctca gccgcctgc atcctgggac cggatcagac actacaggat ccactgcctt  
420  
gacaatggct ggctgtacat ctcaccgcgc ctcaccttcc cctcactcca ggccttggg  
480  
gaccattact ctgagctggc ggatgacatc tgctgcctac tcaaggagcc ctgtgtcctg  
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600  
ccactcaact ggaaagagct ggacagctcc ctctgtttt ctgaagctgc cacaggggag  
660  
gagtctcttc tcagtgaggg tctccgggag tccctcagct tctacatcag cctgaatgac  
720  
gaggctgtct ctttgatga tgcctaggcc caaaggagag gccaaaaggg aaaccaaggc  
780  
tgcacaccta gaacccaat tcagcctcct gggcaccca gaggaaggc tgtgca  
837

&lt;210&gt; 5514

&lt;211&gt; 248

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5514

Xaa	Ser	Leu	Ser	Ser	Ser	Val	Gln	Gly	Gln	Gly	Pro	Val	Thr	Met	Glu
1			5					10						15	
Ala	Glu	Arg	Ser	Lys	Ala	Thr	Ala	Ala	Leu	Gly	Ser	Phe	Pro	Ala	
		20					25					30			
Gly	Gly	Pro	Ala	Glu	Leu	Ser	Leu	Arg	Leu	Gly	Glu	Pro	Leu	Thr	Ile
		35				40					45				
Val	Ser	Glu	Asp	Gly	Asp	Trp	Trp	Thr	Val	Leu	Ser	Glu	Val	Ser	Gly
		50				55				60					
Arg	Glu	Tyr	Asn	Ile	Pro	Ser	Val	His	Val	Ala	Lys	Val	Ser	His	Gly
65				70				75						80	
Trp	Leu	Tyr	Glu	Gly	Leu	Ser	Arg	Glu	Lys	Ala	Glu	Asp	Leu	Leu	Leu
			85					90					95		
Leu	Pro	Gly	Asn	Pro	Gly	Gly	Ala	Phe	Leu	Ile	Arg	Glu	Ser	Gln	Thr
		100					105					110			
Arg	Arg	Gly	Ser	Tyr	Ser	Leu	Ser	Val	Arg	Leu	Ser	Arg	Pro	Ala	Ser
		115				120					125				
Trp	Asp	Arg	Ile	Arg	His	Tyr	Arg	Ile	His	Cys	Leu	Asp	Asn	Gly	Trp
		130				135				140					
Leu	Tyr	Ile	Ser	Pro	Arg	Leu	Thr	Phe	Pro	Ser	Leu	Gln	Ala	Leu	Val
145				150				155						160	
Asp	His	Tyr	Ser	Glu	Leu	Ala	Asp	Asp	Ile	Cys	Cys	Leu	Leu	Lys	Glu

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          165          170          175
Pro Cys Val Leu Gln Arg Ala Gly Pro Leu Pro Gly Lys Asp Ile Pro
          180          185          190
Leu Pro Val Thr Val Gln Arg Thr Pro Leu Asn Trp Lys Glu Leu Asp
          195          200          205
Ser Ser Leu Leu Phe Ser Glu Ala Ala Thr Gly Glu Glu Ser Leu Leu
          210          215          220
Ser Glu Gly Leu Arg Glu Ser Leu Ser Phe Tyr Ile Ser Leu Asn Asp
225          230          235          240
Glu Ala Val Ser Leu Asp Asp Ala
          245

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<210> 5515  
 <211> 420  
 <212> DNA  
 <213> Homo sapiens

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<400> 5515
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120
aagcttcagc tacaagccct tgagcaagag cacaagaagc tggctgcccg ccttgaggaa
180
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240
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300
ctttgtcacc agcacctgct tcatagtctc tctggagtgc caggaacggg tcatatagat
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420

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<210> 5516  
 <211> 120  
 <212> PRT  
 <213> Homo sapiens

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<400> 5516
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Lys Lys Met Gln Glu Arg Met Ser Ala Gln Leu Ala Ala Glu Ser
20          25          30
Arg Gln Lys Lys Leu Glu Met Glu Lys Leu Gln Leu Ala Leu Glu
35          40          45
Gln Glu His Lys Lys Leu Ala Ala Arg Leu Glu Glu Arg Gly Lys
50          55          60
Asn Lys Gln Val Val Leu Met Leu Val Lys Glu Cys Lys Gln Leu Ser
65          70          75          80
Ser Lys Val Ile Glu Glu Ala Gln Lys Leu Glu Asp Val Met Ala Lys
85          90          95
Leu Ala Ser Ser Leu Cys His Gln His Leu Leu His Ser Leu Ser Gly
100          105          110
Val Pro Gly Thr Gly His Ile Asp

```

115

120

&lt;210&gt; 5517

&lt;211&gt; 804

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5517

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 60  
 gtactgtact gttgtgatct actgattggc attggcatag tagtaggggc aagtgcacaga  
 120  
 atccgtgcca gcagtctcca ggttcagaag caattcaaga ccctgatgat agctctccag  
 180  
 caaccaacac atgggtgacat ggtgattgtg ccaacttggt gctcagttat atgcagggcc  
 240  
 agtgattggt ttaagtgaag accatgggtg agatcatttg tctttggtct aatagaattt  
 300  
 gagctagtag aatttgagtc tccagggaaa gagctacttg accaaattaa actagtagca  
 360  
 ggtagagcat gaatgacagc atattatacc atcaagatgt tcttagagca gtgtatggat  
 420  
 ggatcgattg tactgccatc agttgtgact gacgttgat tcaaggagaa agagaaactt  
 480  
 gtttagaaag cactttgaaa gttttttgag tacgggggtg ccctgtatca ccccgttatg  
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&lt;210&gt; 5518

&lt;211&gt; 85

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5518

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				20				25				30			
Ile	Val	Val	Gly	Ser	Ser	Asp	Arg	Ile	Arg	Ala	Ser	Ser	Leu	Gln	Val
			35				40				45				
Gln	Lys	Gln	Phe	Lys	Thr	Leu	Met	Ile	Ala	Leu	Gln	Gln	Pro	Thr	His
			50			55				60					
Gly	Asp	Met	Val	Ile	Val	Pro	Thr	Cys	Cys	Ser	Val	Ile	Cys	Arg	Ala
65					70					75					80
Ser	Asp	Trp	Phe	Lys											

85

&lt;210&gt; 5519

&lt;211&gt; 401

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5519

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&lt;210&gt; 5520

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5520

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Trp	His	Ser	Lys	Phe	Leu	Met	Val	Arg	Ser	Arg	Gly	Glu	Cys	Gly	Ala
			20					25					30		
Gln	Arg	Gln	Leu	Leu	Cys	Val	Phe	Val	Phe	Arg	Asp	Ser	Leu	Arg	Glu
		35					40				45				
Gly	Asn	Ala	Arg	Arg	Asn	Met	Val	Ser	Ser	Glu	Ala	His	Gly	Cys	Phe
	50					55				60					
Leu	Arg	Pro	Ala	Val	Phe	Tyr	Ala	Thr	Tyr	Pro	Cys	Thr	Ser	Tyr	Ala
65					70					75				80	
Lys	Glu	Thr	Lys	Pro	Ser	Ala	Cys	Leu	Phe	Pro	Leu	Leu	Ile	Ile	Gly
			85					90						95	
Lys	Trp	Met	Leu	Trp											
			100												

&lt;210&gt; 5521

&lt;211&gt; 2524

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5521

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 2524

&lt;210&gt; 5522

&lt;211&gt; 441

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5522

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			20					25					30		
Ser	Ser	Lys	Asn	Val	Arg	Val	Asn	Cys	Leu	Asp	Glu	Asn	Gly	Met	Thr
		35					40					45			
Pro	Leu	Met	His	Ala	Ala	Tyr	Lys	Gly	Lys	Leu	Asp	Met	Cys	Lys	Leu
		50					55					60			
Leu	Leu	Arg	His	Gly	Ala	Asp	Val	Asn	Cys	His	Gln	His	Glu	His	Gly
65				70						75				80	
Tyr	Thr	Ala	Leu	Met	Phe	Ala	Ala	Leu	Ser	Gly	Asn	Lys	Asp	Ile	Thr
			85						90					95	
Trp	Val	Met	Leu	Glu	Ala	Gly	Ala	Glu	Thr	Asp	Val	Val	Asn	Ser	Val
			100					105					110		
Gly	Arg	Thr	Ala	Ala	Gln	Met	Ala	Ala	Phe	Val	Gly	Gln	His	Asp	Cys
		115					120					125			
Val	Thr	Ile	Ile	Asn	Asn	Phe	Phe	Pro	Arg	Glu	Arg	Leu	Asp	Tyr	Tyr
		130				135						140			
Thr	Lys	Pro	Gln	Gly	Leu	Asp	Lys	Glu	Pro	Lys	Leu	Pro	Pro	Lys	Leu

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          180          185          190
Ala Leu Asn Lys Cys Tyr Arg Val Met Asp Leu Ile Cys Glu Lys Cys
          195          200          205
Met Lys Gln Arg Asp Met Asn Glu Val Leu Ala Met Lys Met His Tyr
          210          215          220
Ile Ser Cys Ile Phe Gln Lys Cys Ile Asn Phe Leu Lys Asp Gly Glu
225          230          235          240
Asn Lys Leu Asp Thr Leu Ile Lys Ser Leu Leu Lys Gly Arg Ala Ser
          245          250          255
Asp Gly Phe Pro Val Tyr Gln Glu Lys Ile Ile Arg Glu Ser Ile Arg
          260          265          270
Lys Phe Pro Tyr Cys Glu Ala Thr Leu Leu Gln Gln Leu Val Arg Ser
          275          280          285
Ile Ala Pro Val Glu Ile Gly Ser Asp Pro Thr Ala Phe Ser Val Leu
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Thr Gln Ala Ile Thr Gly Gln Val Gly Phe Val Asp Val Glu Phe Cys
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Thr Thr Cys Gly Glu Lys Gly Ala Ser Lys Arg Cys Ser Val Cys Lys
          325          330          335
Met Val Ile Tyr Cys Asp Gln Thr Cys Gln Lys Thr His Trp Phe Thr
          340          345          350
His Lys Lys Ile Cys Lys Asn Leu Lys Asp Ile Tyr Glu Lys Gln Gln
          355          360          365
Leu Glu Ala Ala Lys Glu Lys Arg Gln Glu Glu Asn His Gly Lys Leu
          370          375          380
Asp Val Asn Ser Asn Cys Val Asn Glu Glu Gln Pro Glu Ala Glu Val
385          390          395          400
Gly Ile Ser Gln Arg Asp Ser Asn Pro Glu Asp Ser Gly Glu Gly Lys
          405          410          415
Lys Glu Ser Leu Glu Ser Glu Ala Glu Leu Glu Gly Leu Gln Asp Ala
          420          425          430
Pro Ala Gly Pro Gln Val Ser Glu Glu
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&lt;210&gt; 5523

&lt;211&gt; 6190

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5523

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<211> 1193

<212> PRT

<213> Homo sapiens

<400> 5524

Met	Pro	Arg	Gly	Glu	Ala	Pro	Gly	Pro	Gly	Arg	Arg	Gly	Ala	Lys	Asp
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Glu	Ala	Leu	Gly	Glu	Glu	Ser	Gly	Glu	Arg	Trp	Ser	Pro	Glu	Phe	His
		20						25				30			
Leu	Gln	Arg	Lys	Leu	Ala	Asp	Ser	Ser	His	Ser	Glu	Gln	Gln	Asp	Arg
		35					40				45				
Asn	Arg	Val	Ser	Glu	Glu	Leu	Ile	Met	Val	Val	Gln	Glu	Met	Lys	Lys
		50				55					60				
Tyr	Phe	Pro	Ser	Glu	Arg	Arg	Asn	Lys	Pro	Ser	Thr	Leu	Asp	Ala	Leu
65					70					75				80	
Asn	Tyr	Ala	Leu	Arg	Cys	Val	His	Ser	Val	Gln	Ala	Asn	Ser	Glu	Phe

4702

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Tyr Thr Glu Pro Cys Glu Asp Leu Arg Asn Asp Glu His Ser Pro Ser
515          520          525
Tyr Gln Gln Ile Asn Cys Ile Asp Ser Val Ile Arg Tyr Leu Lys Ser
530          535          540
Tyr Asn Ile Pro Ala Leu Lys Arg Lys Cys Ile Ser Cys Thr Asn Thr
545          550          555          560
Thr Ser Ser Ser Ser Glu Glu Asp Lys Gln Asn His Lys Ala Asp Asp
          565          570          575
Val Gln Ala Leu Gln Gly Asn Lys Asn Ala Pro Gln Lys Met Pro Thr
          580          585          590
Asn Gly Arg Ser Ile Asp Thr Gly Gly Gly Ala Pro Gln Ile Leu Ser
          595          600          605
Thr Ala Met Leu Ser Leu Gly Ser Gly Ile Ser Gln Cys Gly Tyr Ser
610          615          620
Ser Thr Ile Val His Val Pro Pro Pro Glu Thr Ala Arg Asp Ala Thr
625          630          635          640
Leu Phe Cys Glu Pro Trp Thr Leu Asn Met Gln Pro Ala Pro Leu Thr
          645          650          655
Ser Glu Glu Phe Lys His Val Gly Leu Thr Ala Ala Val Leu Ser Ala
          660          665          670
His Thr Gln Lys Glu Glu Gln Asn Tyr Val Asp Lys Phe Arg Glu Lys
          675          680          685
Ile Leu Ser Ser Pro Tyr Ser Ser Tyr Leu Gln Gln Glu Ser Arg Ser
690          695          700
Lys Ala Lys Tyr Ser Tyr Phe Gln Gly Asp Ser Thr Ser Lys Gln Thr
705          710          715          720
Arg Ser Ala Gly Cys Arg Lys Gly Lys His Lys Arg Lys Lys Leu Pro
          725          730          735
Glu Pro Pro Asp Ser Ser Ser Ser Asn Thr Gly Ser Gly Pro Arg Arg
          740          745          750
Gly Ala His Gln Asn Ala Gln Pro Cys Cys Pro Ser Ala Ala Ser Ser
          755          760          765
Pro His Thr Ser Ser Pro Thr Phe Pro Pro Ala Ala Met Val Pro Ser
770          775          780
Gln Ala Pro Tyr Leu Val Pro Ala Phe Pro Leu Pro Ala Ala Thr Ser
785          790          795          800
Pro Gly Arg Glu Tyr Ala Ala Pro Gly Thr Ala Pro Glu Gly Leu His
          805          810          815
Gly Pro Pro Leu Ser Glu Gly Leu Gln Pro Tyr Pro Ala Phe Pro Phe
          820          825          830
Pro Tyr Leu Asp Thr Phe Met Thr Val Phe Leu Pro Asp Pro Pro Val
          835          840          845
Cys Pro Leu Leu Ser Pro Ser Phe Leu Pro Cys Pro Phe Leu Gly Ala
850          855          860
Thr Ala Ser Ser Ala Ile Ser Pro Ser Met Ser Ser Ala Met Ser Pro
865          870          875          880
Thr Leu Asp Pro Pro Ser Val Thr Ser Gln Arg Arg Glu Glu Glu
          885          890          895
Lys Trp Glu Ala Gln Ser Glu Gly His Pro Phe Ile Thr Ser Arg Ser
          900          905          910
Ser Ser Pro Leu Gln Leu Asn Leu Leu Gln Glu Glu Met Pro Arg Pro
          915          920          925
Ser Glu Ser Pro Asp Gln Met Arg Arg Asn Thr Cys Pro Gln Thr Glu
930          935          940

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Tyr Gln Cys Val Thr Gly Asn Asn Gly Ser Glu Ser Ser Pro Ala Thr  
 945 950 955 960  
 Thr Gly Ala Leu Ser Thr Gly Ser Pro Pro Arg Glu Asn Pro Ser His  
 965 970 975  
 Pro Thr Ala Ser Ala Leu Ser Thr Gly Ser Pro Pro Met Lys Asn Pro  
 980 985 990  
 Ser His Pro Thr Ala Ser Ala Leu Ser Thr Gly Ser Pro Pro Met Lys  
 995 1000 1005  
 Asn Pro Ser His Pro Thr Ala Ser Thr Leu Ser Met Gly Leu Pro Pro  
 1010 1015 1020  
 Ser Arg Thr Pro Ser His Pro Thr Ala Thr Val Leu Ser Thr Gly Ser  
 1025 1030 1035 1040  
 Pro Pro Ser Glu Ser Pro Ser Arg Thr Gly Ser Ala Ala Ser Gly Ser  
 1045 1050 1055  
 Ser Asp Ser Ser Ile Tyr Leu Thr Ser Ser Val Tyr Ser Ser Lys Ile  
 1060 1065 1070  
 Ser Gln Asn Gly Gln Gln Ser Gln Asp Val Gln Lys Lys Glu Thr Phe  
 1075 1080 1085  
 Pro Asn Val Ala Glu Glu Pro Ile Trp Arg Met Ile Arg Gln Thr Pro  
 1090 1095 1100  
 Glu Arg Ile Leu Met Thr Tyr Gln Val Pro Glu Arg Val Lys Glu Val  
 1105 1110 1115 1120  
 Val Leu Lys Glu Asp Leu Glu Lys Leu Glu Ser Met Arg Gln Gln Gln  
 1125 1130 1135  
 Pro Gln Phe Ser His Gly Gln Lys Glu Glu Leu Ala Lys Val Tyr Asn  
 1140 1145 1150  
 Trp Ile Gln Ser Gln Thr Val Thr Gln Glu Ile Asp Ile Gln Ala Cys  
 1155 1160 1165  
 Val Thr Cys Glu Asn Glu Asp Ser Ala Asp Gly Ala Ala Thr Ser Cys  
 1170 1175 1180  
 Gly Gln Val Leu Val Glu Asp Ser Cys  
 1185 1190

&lt;210&gt; 5525

&lt;211&gt; 761

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5525

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 60  
 ctgagatgga ctttatctgc ctacctgcct ctgcttgctc agtgggaaca tgaggagaga  
 120  
 gtgggcatca gtggttcttg ggcagggtct ctcttctgag atggggatta aggaagaggg  
 180  
 tgagcagggg tggatgttta gggggatgcc taaattcccc agtaaggaga ccgcagataa  
 240  
 actcaactct gtccatctta gcagggtat gtgaccttg aggatgtggc tgtctacttc  
 300  
 tcccaggagg aatggagatt gcttgatgac gctcagaggc tcctctaccg caatgtgatg  
 360  
 ctggagaact ttacacttct ggcctctctg ggacttgcgt cttccaagac ccatgaaata  
 420

acccagctgg agtcatggga ggagcccttc atgcctgctt gggaagttgt gacttcagcc  
 480  
 ataccgagag aaactctgag gatggccttt atgagggagc tggcaattga acatcattca  
 540  
 tctaaatatg cacactggag gcaagatgag aattcctgac agattgtcct tcctgagaag  
 600  
 acagccctct gccttggagc tccagagaga gggagccctg tattcttggc tgtaccctgc  
 660  
 gaatggagtt ttgatctcgc tgagtttggg gttgggggag gaaaggagtg gtcttgggtc  
 720  
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 761

<210> 5526

<211> 102

<212> PRT

<213> Homo sapiens

<400> 5526

Val	Thr	Phe	Glu	Asp	Val	Ala	Val	Tyr	Phe	Ser	Gln	Glu	Glu	Trp	Arg
1				5					10					15	
Leu	Leu	Asp	Asp	Ala	Gln	Arg	Leu	Leu	Tyr	Arg	Asn	Val	Met	Leu	Glu
			20					25					30		
Asn	Phe	Thr	Leu	Leu	Ala	Ser	Leu	Gly	Leu	Ala	Ser	Ser	Lys	Thr	His
		35					40					45			
Glu	Ile	Thr	Gln	Leu	Glu	Ser	Trp	Glu	Glu	Pro	Phe	Met	Pro	Ala	Trp
	50					55					60				
Glu	Val	Val	Thr	Ser	Ala	Ile	Pro	Arg	Glu	Thr	Leu	Arg	Met	Ala	Phe
65					70					75				80	
Met	Arg	Glu	Leu	Ala	Ile	Glu	His	His	Ser	Ser	Lys	Tyr	Ala	His	Trp
				85					90					95	
Arg	Gln	Asp	Glu	Asn	Ser										
															100

<210> 5527

<211> 728

<212> DNA

<213> Homo sapiens

<400> 5527

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 120  
 gaccttgatg atcttgccat tctctacctg gccacagttc aagccattgc tttggggact  
 180  
 cgcttcatta tagaagccat ggaggcagca gggcactcaa tcagtactct tttcctatgt  
 240  
 ggaggcctca gcaagaatcc cctttttgtg caaatgcatg cggacattac tggcatgcct  
 300  
 gtggtcctgt cgcaagaggt ggagtcctgt cttgtgggtg ctgctgttct gggtgccctgt  
 360  
 gcctcagggg atttcgcttc tgtacaggaa gcaatggcaa aaatgagcaa agttgggaaa  
 420

gttgtgttcc cgagactaca ggataaaaaa tactatgata agaaatacca agtattcctg  
 480  
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 540  
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 600  
 atgttcaaga cccttgaggt attgtttcat catttctgta ttgtctttca ataaagaaaa  
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 728

<210> 5528

<211> 176

<212> PRT

<213> Homo sapiens

<400> 5528

Xaa	Asp	Leu	Thr	Leu	Lys	Gly	Met	Arg	Thr	Thr	Gly	Tyr	Leu	Tyr	Ile
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Pro	Ala	Leu	Ala	Ala	Leu	His	Ser	Pro	Ser	Ser	Leu	Leu	Ser	Pro	Gln
		20						25					30		
Val	Thr	Gly	Leu	Lys	Leu	Ser	Gln	Asp	Leu	Asp	Asp	Leu	Ala	Ile	Leu
		35					40					45			
Tyr	Leu	Ala	Thr	Val	Gln	Ala	Ile	Ala	Leu	Gly	Thr	Arg	Phe	Ile	Ile
		50				55					60				
Glu	Ala	Met	Glu	Ala	Ala	Gly	His	Ser	Ile	Ser	Thr	Leu	Phe	Leu	Cys
65					70					75				80	
Gly	Gly	Leu	Ser	Lys	Asn	Pro	Leu	Phe	Val	Gln	Met	His	Ala	Asp	Ile
				85					90					95	
Thr	Gly	Met	Pro	Val	Val	Leu	Ser	Gln	Glu	Val	Glu	Ser	Val	Leu	Val
			100					105					110		
Gly	Ala	Ala	Val	Leu	Gly	Ala	Cys	Ala	Ser	Gly	Asp	Phe	Ala	Ser	Val
		115					120					125			
Gln	Glu	Ala	Met	Ala	Lys	Met	Ser	Lys	Val	Gly	Lys	Val	Val	Phe	Pro
		130				135					140				
Arg	Leu	Gln	Asp	Lys	Lys	Tyr	Tyr	Asp	Lys	Lys	Tyr	Gln	Val	Phe	Leu
145					150					155				160	
Lys	Leu	Val	Glu	His	Gln	Lys	Glu	Tyr	Leu	Ala	Ile	Met	Asn	Asp	Asp
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<210> 5529

<211> 2602

<212> DNA

<213> Homo sapiens

<400> 5529

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 120  
 actcgagtcc agcggcctat cgtcaggctt ttgagttgcc caggaactgt ggccaaagac  
 180



cttaggagag acgagcagcc ttcagggagc gtggagacag gttttgaaga caagattccc  
240  
aaaaggagat tctctgagat gcaaaatgaa agacgagaac aggcacagcg gactgtttta  
300  
atacattgcc cagagaaaat cagtgaaaac aagtttctta aatatttatc ccaatttgga  
360  
cctattaata atcatttctt ctatgaaagc tttggtctct atgctgtcgt agaattttgc  
420  
caaaaggaaa gcatagggtc actgcagaat gggactcata ctccaagcac ggccatggag  
480  
actgcaattc cattcagatc acgtttcttc aatctgaagt tgaaaaacca gacttctgaa  
540  
cgggtcacgcg tacgggtcaag taatcagttg ccacgttcaa acaagcagct ttttgaatta  
600  
ctttgttatg cagaaagtat agacgatcag ctgaacactc tcttgaagga gttccagcta  
660  
acagaggaga aactaagct ccgatatctc acctgttctc ttattgaaga catggccgcc  
720  
gcgtattttc cagactgcat agtcagaccc tttggctcct cagtcaacac ttttgggaag  
780  
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840  
aagatctcag gaaattttct gatggaattt caagtgaaaa atgttccttc agaaagaatt  
900  
gcaactcaga agatcctgtc tgtgttagga gagtgccttg accactttgg ccttggctgt  
960  
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1020  
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1080  
ctttatatat atggtgccct agactcaaga gtgagagcct tgggtgttcag tgtacgggtg  
1140  
tgggctcgag cacattcact aacaagtagt attcctgggtg catggattac aaatttctcc  
1200  
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1260  
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1320  
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1380  
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1440  
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tttgaaactt ctctcaacat aagcaaaaat gtaagtcaaa gccagctgca aaaatttgta  
1560  
gatttggccc gagaaagtgc ctggatttta caacaggaag atacagatcg accttcata  
1620  
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1680  
tcctttacca agaagaaaag caataagttt gcaattgaaa cagtcaaaaa cttgctagaa  
1740  
tctttaaaag gtaacagaac agaaaatttc acaaaaacca gtgggaagag aacaattagt  
1800

actcagacat gatggctgct acattgtgta aagaactggg cttagcctat caaatggctc  
 1860  
 gtggacttac ttggaaaaac tgatttgaaa ctttcacaga tctcagcttt catctgatgt  
 1920  
 cacttttcat gatctttctca ttggccccct taacctgggc tgaagttctg ggatgttttc  
 1980  
 agtttgatca gtctgatact cagtggcact ttattaaaac atcagctgtg gagtgtggcg  
 2040  
 gtgcacacct gtagtcccag ctgctcagga ggctgaggca ggaggatctc ttgagcccag  
 2100  
 gattttgaat ccatcgtgga caacatagca agattccatc tctaaaaaaaa atgaaaaataa  
 2160  
 acataagcca caaggaatgg gtgaaagatt attgtaatgt gctttaacta aataggtaaa  
 2220  
 tatactaaac aaatgctaaa actcagtttt aggatgaaac cattgttgat atccacatca  
 2280  
 gtccctgttt agaaaacatt taaaatgact tttagttatg tacagtacgt tggcaatgaa  
 2340  
 tacattaagc ttcaaaatgt ggtagtgtc tcgaatatgt atatttgtat ttttcaagcg  
 2400  
 aagtctcttt attcacatat aaattaaagt ggggttggtac tgatatcaaa aaatgtttat  
 2460  
 gtttttagaa cagacatttc agtcactgca ttcttaggta ttccaaacca aatatgatga  
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<210> 5530

<211> 603

<212> PRT

<213> Homo sapiens

<400> 5530

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Phe	Phe	Phe	Leu	Ala	Met	Ala	Val	Pro	Gly	Val	Gly	Leu	Leu	Thr	Arg
			20					25				30			
Leu	Asn	Leu	Cys	Ala	Arg	Arg	Arg	Thr	Arg	Val	Gln	Arg	Pro	Ile	Val
			35					40				45			
Arg	Leu	Leu	Ser	Cys	Pro	Gly	Thr	Val	Ala	Lys	Asp	Leu	Arg	Arg	Asp
			50					55			60				
Glu	Gln	Pro	Ser	Gly	Ser	Val	Glu	Thr	Gly	Phe	Glu	Asp	Lys	Ile	Pro
65						70				75				80	
Lys	Arg	Arg	Phe	Ser	Glu	Met	Gln	Asn	Glu	Arg	Arg	Glu	Gln	Ala	Gln
			85					90						95	
Arg	Thr	Val	Leu	Ile	His	Cys	Pro	Glu	Lys	Ile	Ser	Glu	Asn	Lys	Phe
			100					105					110		
Leu	Lys	Tyr	Leu	Ser	Gln	Phe	Gly	Pro	Ile	Asn	Asn	His	Phe	Phe	Tyr
			115					120				125			
Glu	Ser	Phe	Gly	Leu	Tyr	Ala	Val	Val	Glu	Phe	Cys	Gln	Lys	Glu	Ser
			130					135				140			
Ile	Gly	Ser	Leu	Gln	Asn	Gly	Thr	His	Thr	Pro	Ser	Thr	Ala	Met	Glu

145                      150                      155                      160  
 Thr Ala Ile Pro Phe Arg Ser Arg Phe Phe Asn Leu Lys Leu Lys Asn  
                                  165                      170                      175  
 Gln Thr Ser Glu Arg Ser Arg Val Arg Ser Ser Asn Gln Leu Pro Arg  
                                  180                      185                      190  
 Ser Asn Lys Gln Leu Phe Glu Leu Leu Cys Tyr Ala Glu Ser Ile Asp  
                                  195                      200                      205  
 Asp Gln Leu Asn Thr Leu Leu Lys Glu Phe Gln Leu Thr Glu Glu Asn  
                                  210                      215                      220  
 Thr Lys Leu Arg Tyr Leu Thr Cys Ser Leu Ile Glu Asp Met Ala Ala  
 225                                   230                                   235                                   240  
 Ala Tyr Phe Pro Asp Cys Ile Val Arg Pro Phe Gly Ser Ser Val Asn  
                                  245                                   250                                   255  
 Thr Phe Gly Lys Leu Gly Cys Asp Leu Asp Met Phe Leu Asp Leu Asp  
                                  260                                   265                                   270  
 Glu Thr Arg Asn Leu Ser Ala His Lys Ile Ser Gly Asn Phe Leu Met  
                                  275                                   280                                   285  
 Glu Phe Gln Val Lys Asn Val Pro Ser Glu Arg Ile Ala Thr Gln Lys  
                                  290                                   295                                   300  
 Ile Leu Ser Val Leu Gly Glu Cys Leu Asp His Phe Gly Pro Gly Cys  
 305                                   310                                   315                                   320  
 Val Gly Val Gln Lys Ile Leu Asn Ala Arg Cys Pro Leu Val Arg Phe  
                                  325                                   330                                   335  
 Ser His Gln Ala Ser Gly Phe Gln Cys Asp Leu Thr Thr Asn Asn Arg  
                                  340                                   345                                   350  
 Ile Ala Leu Thr Ser Ser Glu Leu Tyr Ile Tyr Gly Ala Leu Asp  
                                  355                                   360                                   365  
 Ser Arg Val Arg Ala Leu Val Phe Ser Val Arg Cys Trp Ala Arg Ala  
                                  370                                   375                                   380  
 His Ser Leu Thr Ser Ser Ile Pro Gly Ala Trp Ile Thr Asn Phe Ser  
 385                                   390                                   395                                   400  
 Leu Thr Met Met Val Ile Phe Phe Leu Gln Arg Arg Ser Pro Pro Ile  
                                  405                                   410                                   415  
 Leu Pro Thr Leu Asp Ser Leu Lys Thr Leu Ala Asp Ala Glu Asp Lys  
                                  420                                   425                                   430  
 Cys Val Ile Glu Gly Asn Asn Cys Thr Phe Val Arg Asp Leu Ser Arg  
                                  435                                   440                                   445  
 Ile Lys Pro Ser Gln Asn Thr Glu Thr Leu Glu Leu Leu Leu Lys Glu  
                                  450                                   455                                   460  
 Phe Phe Glu Tyr Phe Gly Asn Phe Ala Phe Asp Lys Asn Ser Ile Asn  
 465                                   470                                   475                                   480  
 Ile Arg Gln Gly Arg Glu Gln Asn Lys Pro Asp Ser Ser Pro Leu Tyr  
                                  485                                   490                                   495  
 Ile Gln Asn Pro Phe Glu Thr Ser Leu Asn Ile Ser Lys Asn Val Ser  
                                  500                                   505                                   510  
 Gln Ser Gln Leu Gln Lys Phe Val Asp Leu Ala Arg Glu Ser Ala Trp  
                                  515                                   520                                   525  
 Ile Leu Gln Gln Glu Asp Thr Asp Arg Pro Ser Ile Ser Ser Asn Arg  
                                  530                                   535                                   540  
 Pro Trp Gly Leu Val Ser Leu Leu Leu Pro Ser Ala Pro Asn Arg Lys  
 545                                   550                                   555                                   560  
 Ser Phe Thr Lys Lys Lys Ser Asn Lys Phe Ala Ile Glu Thr Val Lys  
                                  565                                   570                                   575  
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580 585 590  
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 <212> DNA  
 <213> Homo sapiens  
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 120  
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 420  
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 660  
 gaggccaagc gcgcagtgcg tgagctcaac aactacgaga tccgcccggg ccgcctgctc  
 720  
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 780  
 aagcgcgagg aaatcctgga ggagattgcc aaggtcaccg agggcgtgct ggacgtgac  
 840  
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 900  
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 960  
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 1020  
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 1080  
 aagaagagct tcggccagtt caaccccggc tgcgtggagc gcgtcaagaa gatccgcgac  
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 1260  
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 1320

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1380  
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 <212> PRT  
 <213> Homo sapiens

<400> 5532  
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 Pro His Pro Gln Arg Gly Cys Glu Val Phe Val Gly Lys Ile Pro Arg  
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 100 105 110  
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 Thr Ser Arg Glu Asp Ala Val His Ala Met Asn Asn Leu Asn Gly Thr  
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 Glu Leu Glu Gly Ser Cys Leu Glu Val Thr Leu Ala Lys Pro Val Asp  
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 Lys Glu Gln Tyr Ser Arg Tyr Gln Lys Ala Ala Arg Gly Gly Gly Ala  
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 Ala Glu Ala Ala Gln Gln Pro Ser Tyr Val Tyr Ser Cys Asp Pro Tyr

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Ala Ala Gly Asn Arg Ala Pro Gly Pro Arg Gly Ser Tyr Leu Gly Gly
385          390          395          400
Tyr Ser Ala Gly Arg Gly Ile Tyr Ser Arg Tyr His Glu Gly Lys Gly
          405          410          415
Lys Gln Gln Glu Lys Gly Tyr Glu Leu Val Pro Asn Leu Glu Ile Pro
          420          425          430
Thr Val Asn Pro Val Ala Ile Lys Pro Gly Thr Val Ala Ile Pro Ala
          435          440          445
Ile Gly Ala Gln Tyr Ser Met Phe Pro Ala Ala Pro Ala Pro Lys Met
          450          455          460
Ile Glu Asp Gly Lys Ile His Thr Val Glu His Met Ile Ser Pro Ile
465          470          475          480
Ala Val Gln Pro Asp Pro Ala Ser Ala Ala Ala Ala Ala Ala Ala
          485          490          495
Ala Ala Ala Ala Ala Ala Val Ile Pro Thr Val Ser Thr Pro Pro Pro
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Phe Gln Gly Arg Pro Ile Thr Pro Val Tyr Thr Val Ala Pro Asn Val
          515          520          525
Gln Arg Ile Pro Thr Ala Gly Ile Tyr Gly Ala Ser Tyr Val Pro Phe
          530          535          540
Ala Ala Pro Ala Thr Ala Thr Ile Ala Thr Leu Gln Lys Asn Ala Ala
545          550          555          560
Ala Ala Ala Ala Val Tyr Gly Gly Tyr Ala Gly Tyr Ile Pro Gln Ala
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Phe Pro Ala Ala Ala Ile Gln Val Pro Ile Pro Asp Val Tyr Gln Thr
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Tyr

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&lt;210&gt; 5533

&lt;211&gt; 505

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5533

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 <212> PRT  
 <213> Homo sapiens

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 Tyr Arg Arg Gly Leu Ser Lys Tyr Glu Ser Ile Asp Glu Asp Glu Leu  
 35 40 45  
 Leu Ala Ser Leu Ser Ala Glu Glu Leu Lys Glu Leu Glu Arg Glu Leu  
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 Glu Asp Ile Glu Pro Asp Arg Asn Leu Pro Val Gly Leu Arg Gln Lys  
 65 70 75 80  
 Ser Leu Thr Glu Lys Thr Pro Thr Gly Thr Phe Ser Arg Glu Ala Leu  
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 Met Ala Tyr Trp Glu Lys Glu Ser Gln Lys Leu Leu Glu Lys Glu Arg  
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 115 120 125  
 Glu Leu Ile Phe Thr Glu Ser Asn Ser Glu Val Ser Glu Glu Val Tyr  
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 Ser Asp Glu Glu Glu Arg Thr Ile  
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<210> 5535  
 <211> 1887  
 <212> DNA  
 <213> Homo sapiens

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1887

&lt;210&gt; 5536

&lt;211&gt; 306

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5536

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      20           25           30
Pro Gly Glu Thr Pro Lys His Gln Pro Gly Ser Pro Arg Gly Ser Gly
      35           40           45
Arg Glu Glu Asp Asp Glu Leu Leu Gly Asn Asp Asp Ser Asp Lys Thr
      50           55           60
Glu Leu Leu Ala Gly Gln Lys Lys Ser Ser Pro Phe Trp Thr Phe Glu
65           70           75           80
Tyr Tyr Gln Thr Phe Phe Asp Val Asp Thr Tyr Gln Val Phe Asp Arg
      85           90           95
Ile Lys Gly Ser Leu Leu Pro Ile Pro Gly Lys Asn Phe Val Arg Leu
      100          105          110
Tyr Ile Arg Ser Asn Pro Asp Leu Tyr Gly Pro Phe Trp Ile Cys Ala
      115          120          125
Thr Leu Val Phe Ala Ile Ala Ile Ser Gly Asn Leu Ser Asn Phe Leu
      130          135          140
Ile His Leu Gly Glu Lys Thr Tyr His Tyr Val Pro Glu Phe Arg Lys
145          150          155          160
Val Ser Ile Ala Ala Thr Ile Ile Tyr Ala Tyr Ala Trp Leu Val Pro
      165          170          175
Leu Ala Leu Trp Gly Phe Leu Met Trp Arg Asn Ser Lys Val Met Asn
      180          185          190
Ile Val Ser Tyr Ser Phe Leu Glu Ile Val Cys Val Tyr Gly Tyr Ser
      195          200          205
Leu Phe Ile Tyr Ile Pro Thr Ala Ile Leu Trp Ile Ile Pro Gln Lys
      210          215          220
Ala Val Arg Trp Ile Leu Val Met Ile Ala Leu Gly Ile Ser Gly Ser
225          230          235          240
Leu Leu Ala Met Thr Phe Trp Pro Ala Val Arg Glu Asp Asn Arg Arg
      245          250          255
Val Ala Leu Ala Thr Ile Val Thr Ile Val Leu Leu His Met Leu Leu
      260          265          270
Ser Val Gly Cys Leu Ala Tyr Phe Phe Asp Ala Pro Glu Met Asp His
      275          280          285
Leu Pro Thr Thr Thr Ala Thr Pro Asn Gln Thr Val Ala Ala Ala Lys
      290          295          300
Ser Ser
305

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&lt;210&gt; 5537

&lt;211&gt; 2881

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5537

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<210> 5538
<211> 352
<212> PRT
<213> Homo sapiens
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<400> 5538
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Ala Glu Leu Arg His Leu Asp Thr Gln Val Gln Arg Cys Glu Asp Ile
 35      40      45
Leu Gln Gln Leu Gln Ala Val Val Pro Gln Ile Asp Met Glu Gly Asp

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Ile Met Cys Met Asp His Leu Glu Glu Met Leu Lys Leu Val Asn Gly		80
	85	90
Asn Pro Val Val Met Lys Asp Gly Lys Trp Val Val Gln Lys Tyr Ile		95
	100	105
Glu Arg Pro Leu Leu Ile Phe Gly Thr Lys Phe Asp Leu Arg Gln Trp		110
	115	120
Phe Leu Val Thr Asp Trp Asn Pro Leu Thr Val Trp Phe Tyr Arg Asp		125
	130	135
Ser Tyr Ile Arg Phe Ser Thr Gln Pro Phe Ser Leu Lys Asn Leu Asp		140
145	150	155
Asn Ser Val His Leu Cys Asn Asn Ser Ile Gln Lys His Leu Glu Asn		160
	165	170
Ser Cys His Arg His Pro Leu Leu Pro Pro Asp Asn Met Trp Ser Ser		175
	180	185
Gln Arg Phe Gln Ala His Leu Gln Glu Met Gly Ala Pro Asn Ala Trp		190
	195	200
Ser Thr Ile Ile Val Pro Gly Met Lys Asp Ala Val Ile His Ala Leu		205
	210	215
Gln Thr Ser Gln Asp Thr Val Gln Cys Arg Lys Ala Ser Phe Glu Leu		220
225	230	235
Tyr Gly Ala Asp Phe Val Phe Gly Glu Asp Phe Gln Pro Trp Leu Ile		240
	245	250
Glu Ile Asn Ala Ser Pro Thr Met Ala Pro Ser Thr Ala Val Thr Ala		255
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Arg Leu Cys Ala Gly Val Gln Ala Asp Thr Leu Arg Val Val Ile Asp		270
	275	280
Arg Arg Leu Asp Arg Asn Cys Asp Thr Gly Ala Phe Glu Leu Ile Tyr		285
	290	295
Lys Gln Pro Val Thr Thr Ser Pro Ala Ser Thr Pro Arg Pro Ser Cys		300
305	310	315
Leu Leu Pro Met Tyr Ser Asp Thr Arg Ala Arg Ser Ser Asp Asp Ser		320
	325	330
Thr Ala Ser Trp Trp Ala Leu Arg Pro Cys Arg Pro Gln Ala Arg Pro		335
	340	345
		350

&lt;210&gt; 5539

&lt;211&gt; 1887

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5539

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1860  
aaaaaaaaaa aaaaaaaaaa aaaaaaa  
1887

&lt;210&gt; 5540

&lt;211&gt; 378

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5540

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 20           25           30
Ala Ala Met Gly Pro Ser Ala Leu Gly Gln Ser Gly Pro Gly Ser Met
 35           40           45
Ala Pro Trp Cys Ser Val Ser Ser Gly Pro Ser Arg Tyr Val Leu Gly
 50           55           60
Met Gln Glu Leu Phe Arg Gly His Ser Lys Thr Arg Glu Phe Leu Ala
 65           70           75           80
His Ser Ala Lys Val His Ser Val Ala Trp Ser Cys Asp Gly Arg Arg
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Ser Pro Asp Gly Gln Thr Ile Ala Val Gly Asn Lys Asp Asp Val Val
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Lys Phe Glu Val Asn Glu Ile Ser Trp Asn Asn Asp Asn Asn Met Phe
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Phe Leu Thr Asn Gly Asn Gly Cys Ile Asn Ile Leu Ser Tyr Pro Glu
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Leu Lys Pro Val Gln Ser Ile Asn Ala His Pro Ser Asn Cys Ile Cys
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Ile Lys Phe Asp Pro Met Gly Lys Tyr Phe Ala Thr Gly Ser Ala Asp
260           265           270
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275           280           285
Phe Ser Arg Leu Asp Trp Pro Val Arg Thr Leu Ser Phe Ser His Asp
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Gly Lys Met Leu Ala Ser Ala Ser Glu Asp His Phe Ile Asp Ile Ala
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&lt;210&gt; 5541

&lt;211&gt; 1854

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5541

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<211> 315

<212> PRT

<213> Homo sapiens

<400> 5542

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&lt;210&gt; 5543

&lt;211&gt; 4021

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5543

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&lt;210&gt; 5544

&lt;211&gt; 1141

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5544

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&lt;210&gt; 5546



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 1380  
 aaaaaaaaaa a  
 1391

&lt;210&gt; 5548

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5548

Xaa Val Leu Arg Arg Thr Val Ser Tyr Arg Leu Leu Leu Trp Gly Arg  
 1 5 10 15  
 Gly Ser Leu Ala Arg Lys Gln Gly Leu Trp Lys Thr Ala Ala Pro Glu  
 20 25 30  
 Leu Gln Thr Asn Val Arg Ser Gln Ile Leu Arg Leu Arg His Thr Ala  
 35 40 45  
 Phe Val Ile Pro Lys Lys Asn Val Pro Thr Ser Lys Arg Glu Thr Tyr  
 50 55 60  
 Thr Glu Asp Phe Ile Lys Lys Gln Ile Glu Glu Phe Asn Ile Gly Lys  
 65 70 75 80  
 Arg His Leu Ala Asn Met Met Gly Glu Asp Pro Glu Thr Phe Thr Gln  
 85 90 95  
 Glu Asp Ile Asp Arg Ala Ile Ala Tyr Leu Phe Pro Ser Gly Leu Phe  
 100 105 110  
 Glu Lys Arg Ala Arg Pro Val Met Lys His Pro Glu Gln Ile Phe Pro  
 115 120 125  
 Arg Gln Arg Ala Ile Gln Trp Gly Glu Asp Gly Arg Pro Phe His Tyr

130		135		140
Leu Phe Tyr Thr Gly Lys Gln Ser Tyr Tyr Ser Leu Met His Asp Val				
145		150		155
Xaa Met Glu Cys Tyr Ser Ile				160
	165			

&lt;210&gt; 5549

&lt;211&gt; 1865

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5549

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 1865

&lt;210&gt; 5550

&lt;211&gt; 242

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5550

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Leu	Gly	Val	Arg	Ala	Val	Leu	Gln	Leu	Pro	Gly	Leu	Thr	Gln	Val	
		20					25					30			
Arg	Trp	Ser	Arg	Tyr	Ser	Pro	Glu	Phe	Lys	Asp	Pro	Leu	Ile	Asp	Lys
	35					40					45				
Glu	Tyr	Tyr	Arg	Lys	Pro	Val	Glu	Glu	Leu	Thr	Glu	Glu	Glu	Lys	Tyr
	50				55					60					
Val	Arg	Glu	Leu	Lys	Lys	Thr	Gln	Leu	Ile	Lys	Ala	Ala	Pro	Ala	Gly
65				70					75					80	
Lys	Thr	Ser	Ser	Val	Phe	Glu	Asp	Pro	Val	Ile	Ser	Lys	Phe	Thr	Asn
		85						90						95	
Met	Met	Met	Ile	Gly	Gly	Asn	Lys	Val	Leu	Ala	Arg	Ser	Leu	Met	Ile
	100						105					110			
Gln	Thr	Leu	Glu	Ala	Val	Lys	Arg	Lys	Gln	Phe	Glu	Lys	Tyr	His	Ala
	115					120						125			
Ala	Ser	Ala	Glu	Glu	Gln	Ala	Thr	Ile	Glu	Arg	Asn	Pro	Tyr	Thr	Ile
	130				135						140				
Phe	His	Gln	Ala	Leu	Lys	Asn	Cys	Glu	Pro	Met	Ile	Gly	Leu	Val	Pro
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Ile	Leu	Lys	Gly	Gly	Arg	Phe	Tyr	Gln	Val	Pro	Val	Pro	Leu	Pro	Asp
		165						170						175	
Arg	Arg	Arg	Arg	Phe	Leu	Ala	Met	Lys	Trp	Met	Ile	Thr	Glu	Cys	Arg
	180							185					190		
Asp	Lys	Lys	His	Gln	Arg	Thr	Leu	Met	Pro	Glu	Lys	Leu	Ser	His	Lys

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Leu	Leu	Glu	Ala	Phe	His	Asn	Gln	Gly	Pro	Val	Ile	Lys	Arg	Lys	His
	210				215						220				
Asp	Leu	His	Lys	Met	Ala	Glu	Ala	Asn	Arg	Ala	Leu	Ala	His	Tyr	Arg
225				230					235					240	
Trp	Trp														

&lt;210&gt; 5551

&lt;211&gt; 1689

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5551

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<210> 5552

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5552

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Ser	Val	Leu	Ser	Arg	Leu	Ser	Leu	Phe	Pro	His	Pro	His	Ile	His	Glu
		20						25					30		
Tyr	Leu	Leu	Asp	Pro	Tyr	Val	Asn	Leu	Ala	Pro	Gly	Cys	Arg	Ser	Leu
		35					40					45			
Phe	Ser	Val	Ile	Val	Arg	Val	Val	Gly	Asp	Leu	Met	Leu	Arg	Ile	Gln
		50				55					60				
Arg	Ile	Gln	Asp	Phe	Thr	Pro	Lys	Leu	Leu	Leu	Val	Arg	Lys	Arg	Leu
65					70					75				80	
Leu	Gly	Leu	Glu	Pro	Glu	Gly	Pro	Ile	Ser	Asp	Leu	Glu	Pro	Val	Glu
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Ala	Leu	Thr	Val	Ser	Ser	Ile	Cys								
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<210> 5553

<211> 274

<212> DNA

<213> Homo sapiens

<400> 5553

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 180  
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 240

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274

<210> 5554

<211> 90

<212> PRT

<213> Homo sapiens

<400> 5554

Met	Asp	Gly	Gly	Gln	Gly	Thr	Ser	Gly	Pro	Leu	Lys	Thr	Ala	Lys	Gln
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Phe	Leu	Ala	Ile	Ser	Glu	Glu	Val	Ala	Phe	Val	Pro	Glu	Lys	Arg	Thr
			20					25					30		
Pro	Gln	Pro	His	Pro	Thr	Ala	Ser	Pro	Asp	Pro	Lys	Val	Arg	Ile	Thr
		35					40					45			
Gly	Pro	Ala	Thr	Ala	Pro	Ala	Val	Val	Leu	Ser	His	Tyr	Arg	Gly	Cys
		50				55					60				
Tyr	Phe	Pro	Ser	Gln	Cys	Pro	Trp	Gln	Pro	Trp	Lys	Pro	Met	Lys	Gln
65					70					75					80
Ala	Leu	Thr	Gln	Glu	Ser	Leu	Cys	Ile	Phe						
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<210> 5555

<211> 414

<212> DNA

<213> Homo sapiens

<400> 5555

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414

<210> 5556

<211> 115

<212> PRT

<213> Homo sapiens

<400> 5556

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Gly	Gln	Arg	Ser	Asp	Val	Gly	Phe	Arg	Lys	Gln	Gly	Pro	Gly	Gly	Asp
			20					25					30		
Glu	Ser	Gln	Gly	Cys	Asp	Ser	Arg	Arg	Asp	Ser	Cys	Glu	Gly	Pro	Gly

4738



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 1970

&lt;210&gt; 5558

&lt;211&gt; 360

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5558

Met	Asp	Asp	Phe	Thr	Pro	Pro	Gly	Ser	Gly	Ala	Cys	Lys	Phe	Ile	Gly
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Ser	Leu	His	Ser	Tyr	Ser	Phe	Ser	Ser	Lys	His	Thr	Arg	Glu	Arg	Pro
		20						25					30		
Ser	Val	Pro	Arg	Glu	Pro	Ile	Asp	Arg	Lys	Arg	Leu	Lys	Lys	Asp	Val
		35					40					45			
Glu	Pro	Ser	Cys	Ser	Gly	Ser	Ser	Leu	Gly	Pro	Asp	Lys	Gly	Leu	Ala
		50				55					60				
Gln	Ser	Pro	Pro	Ser	Ser	Ser	Leu	Thr	Ala	Thr	Arg	Gln	Lys	Pro	Ser
65					70					75				80	
Gln	Ser	Pro	Ser	Ala	Pro	Pro	Ala	Asp	Val	Thr	Pro	Lys	Pro	Ala	Thr
			85					90						95	
Glu	Ala	Val	Gln	Ser	Glu	His	Ser	Asp	Ala	Ser	Pro	Met	Ser	Ile	Asn
		100						105					110		
Glu	Val	Ile	Leu	Ser	Ala	Ser	Gly	Ala	Cys	Lys	Leu	Ile	Asp	Ser	Leu
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His	Ser	Tyr	Cys	Phe	Ser	Ser	Arg	Gln	Asn	Lys	Ser	Gln	Val	Cys	Cys

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	165	170
Leu Asp Glu Leu Arg Arg Val Ser Val Pro Tyr Pro Ser Ser Leu Leu		175
	180	185
Ser Pro Ser Arg Glu Pro Pro Lys Met Asn Pro Val Val Glu Pro Leu		190
	195	200
Ser Trp Met Leu Gly Thr Trp Leu Ser Asp Pro Pro Gly Ala Gly Thr		205
	210	215
Tyr Pro Thr Leu Gln Pro Phe Gln Tyr Leu Glu Glu Val His Ile Ser		220
225	230	235
His Val Gly Gln Pro Met Leu Asn Phe Ser Phe Asn Ser Phe His Pro		240
	245	250
Asp Thr Arg Lys Pro Met His Arg Glu Cys Gly Phe Ile Arg Leu Lys		255
	260	265
Pro Asp Thr Asn Lys Val Ala Phe Val Ser Ala Gln Asn Thr Gly Val		270
	275	280
Val Glu Val Glu Glu Gly Glu Val Asn Gly Gln Glu Leu Cys Ile Ala		285
	290	295
Ser His Ser Ile Ala Arg Ile Ser Phe Ala Lys Glu Pro His Val Glu		300
305	310	315
Gln Ile Thr Arg Lys Phe Arg Leu Asn Ser Glu Gly Lys Leu Glu Gln		320
	325	330
Thr Val Ser Met Ala Thr Thr Thr Gln Pro Met Thr Gln His Leu His		335
	340	345
Val Thr Tyr Lys Lys Val Thr Pro		350
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&lt;210&gt; 5559

&lt;211&gt; 3866

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5559

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<210> 5560

<211> 1165

<212> PRT

<213> Homo sapiens

<400> 5560

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Asn	Gly	Thr	Tyr	Gly	Gln	Val	Tyr	Lys	Gly	Arg	His	Val	Lys	Thr	Gly	35	40	45	
Gln	Leu	Ala	Ala	Ile	Lys	Val	Met	Asp	Val	Thr	Glu	Asp	Glu	Glu	Glu	50	55	60	
Glu	Ile	Lys	Leu	Glu	Ile	Asn	Met	Leu	Lys	Lys	Tyr	Ser	His	His	Arg	65	70	75	80
Asn	Ile	Ala	Thr	Tyr	Gly	Ala	Phe	Ile	Lys	Lys	Ser	Pro	Pro	Gly	85	90	95		
His	Asp	Asp	Gln	Leu	Trp	Leu	Val	Met	Glu	Phe	Cys	Gly	Ala	Gly	Ser	100	105	110	
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His	Ile	His	His	Val	Ile	His	Arg	Asp	Ile	Lys	Gly	Gln	Asn	Val	Leu	145	150	155	160
Leu	Thr	Glu	Asn	Ala	Glu	Val	Lys	Leu	Val	Asp	Phe	Gly	Val	Ser	Ala	165	170	175	
Gln	Leu	Asp	Arg	Thr	Val	Gly	Arg	Arg	Asn	Thr	Phe	Ile	Gly	Thr	Pro	180	185	190	
Tyr	Trp	Met	Ala	Pro	Glu	Val	Ile	Ala	Cys	Asp	Glu	Asn	Pro	Asp	Ala	195	200	205	
Thr	Tyr	Asp	Tyr	Arg	Ser	Asp	Leu	Trp	Ser	Cys	Gly	Ile	Thr	Ala	Ile	210	215	220	
Glu	Met	Ala	Glu	Gly	Ala	Pro	Pro	Leu	Cys	Asp	Met	His	Pro	Met	Arg	225	230	235	240
Ala	Leu	Phe	Leu	Ile	Pro	Arg	Asn	Pro	Pro	Arg	Leu	Lys	Ser	Lys	245	250	255		
Lys	Trp	Ser	Lys	Phe	Ile	Asp	Phe	Ile	Asp	Thr	Cys	Leu	Ile	Lys	260	265	270		
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Ile	Arg	Asp	Gln	Pro	Thr	Glu	Arg	Gln	Val	Arg	Ile	Gln	Leu	Lys	Asp	290	295	300	
His	Ile	Asp	Arg	Thr	Arg	Lys	Lys	Arg	Gly	Glu	Lys	Glu	Glu	Thr	Glu	305	310	315	320
Tyr	Glu	Tyr	Ser	Gly	Ser	Glu	Glu	Glu	Asp	Asp	Ser	His	Gly	Glu	Glu	325	330	335	
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Glu Tyr Lys Arg Gln Leu Leu Ala Glu Arg Gln Lys Arg Ile Glu Gln
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Gln Lys Glu Gln Arg Arg Arg Leu Glu Glu Gln Gln Arg Arg Glu Arg
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Glu Ala Arg Arg Gln Gln Glu Arg Glu Gln Arg Arg Arg Glu Gln Glu
      420              425              430
Glu Lys Arg Arg Leu Glu Glu Leu Glu Arg Arg Arg Lys Glu Glu Glu
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Glu Arg Arg Arg Ala Glu Glu Glu Lys Arg Arg Val Glu Arg Glu Gln
      450              455              460
Glu Tyr Ile Arg Arg Gln Leu Glu Glu Glu Gln Arg His Leu Glu Val
      465              470              475              480
Leu Gln Gln Gln Leu Leu Gln Glu Gln Ala Met Leu Leu His Asp His
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      500              505              510
Glu Arg Ser Lys Pro Ser Phe His Ala Pro Glu Pro Lys Ala His Tyr
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      580              585              590
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Pro Gly Ser Gln Ser Gly Ser Gly Glu Arg Phe Arg Val Arg Ser Ser
      610              615              620
Ser Lys Ser Glu Gly Ser Pro Ser Gln Arg Leu Glu Asn Ala Val Lys
      625              630              635              640
Lys Pro Glu Asp Lys Lys Glu Val Phe Arg Pro Leu Lys Pro Ala Gly
      645              650              655
Glu Val Asp Leu Thr Ala Leu Ala Lys Glu Leu Arg Ala Val Glu Asp
      660              665              670
Val Arg Pro Pro His Lys Val Thr Asp Tyr Ser Ser Ser Ser Glu Glu
      675              680              685
Ser Gly Thr Thr Asp Glu Glu Asp Asp Asp Val Glu Gln Glu Gly Ala
      690              695              700
Asp Glu Ser Thr Ser Gly Pro Glu Asp Thr Arg Ala Ala Ser Ser Leu
      705              710              715              720
Asn Leu Ser Asn Gly Glu Thr Glu Ser Val Lys Thr Met Ile Val His
      725              730              735
Asp Asp Val Glu Ser Glu Pro Ala Met Thr Pro Ser Lys Glu Gly Thr
      740              745              750
Leu Ile Val Arg Gln Thr Gln Ser Ala Ser Ser Thr Leu Gln Lys His
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Lys Ser Ser Ser Ser Phe Thr Pro Phe Ile Asp Pro Arg Leu Leu Gln

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      820              825              830
Thr Pro Glu Ile Arg Lys Tyr Lys Lys Arg Phe Asn Ser Glu Ile Leu
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Cys Ala Ala Leu Trp Gly Val Asn Leu Leu Val Gly Thr Glu Ser Gly
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865              870              875              880
Asn Arg Arg Arg Phe Gln Gln Met Asp Val Leu Glu Gly Leu Asn Val
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Leu Val Thr Ile Ser Gly Lys Lys Asp Lys Leu Arg Val Tyr Tyr Leu
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Lys Gln Gly Trp Thr Thr Val Gly Asp Leu Glu Gly Cys Val His Tyr
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Lys Val Val Lys Tyr Glu Arg Ile Lys Phe Leu Val Ile Ala Leu Lys
945              950              955              960
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Asp Leu Thr Val Glu Glu Gly Gln Arg Leu Lys Val Ile Tyr Gly Ser
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Cys Ala Gly Phe His Ala Val Asp Val Asp Ser Gly Ser Val Tyr Asp
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Ile Tyr Leu Pro Thr His Val Arg Lys Asn Pro His Ser Met Ile Gln
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Tyr Gly Arg Ile Thr Lys Asp Val Val Leu Gln Trp Gly Glu Met Pro
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Thr Ser Val Ala Tyr Ile Arg Ser Asn Gln Thr Met Gly Trp Gly Glu
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Lys Ala Ile Glu Ile Arg Ser Val Glu Thr Gly His Leu Asp Gly Val
1105              1110              1115              1120
Phe Met His Lys Arg Ala Gln Arg Leu Lys Phe Leu Cys Glu Arg Asn
      1125              1130              1135
Asp Lys Val Phe Phe Ala Ser Val Arg Ser Gly Gly Ser Ser Gln Val
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&lt;210&gt; 5561

&lt;211&gt; 2089

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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&lt;210&gt; 5562

&lt;211&gt; 372

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5562

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Cys	Leu	Asn	Ser	Leu	Ile	Gln	Val	Phe	Val	Met	Asn	Val	Asp	Phe	Thr
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 Leu Tyr Phe Pro Gln Ser Leu Asp Phe Ser Gln Ile Leu Pro Met Lys  
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 Arg Glu Ser Cys Asp Ala Glu Glu Gln Ser Gly Gly Gln Tyr Glu Leu  
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 Val Tyr Ile Arg Asn Ala Val Asp Gly Lys Trp Phe Cys Phe Asn Asp  
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 Ser Asn Ile Cys Leu Val Ser Trp Glu Asp Ile Gln Cys Thr Tyr Gly  
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&lt;210&gt; 5563

&lt;211&gt; 2878

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5563

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2160  
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2340  
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2400  
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2460

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<210> 5564

<211> 683

<212> PRT

<213> Homo sapiens

<400> 5564

Met Ala Ala Ala Val Ala Ala Pro Leu Ala Ala Gly Gly Glu Glu Ala  
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 20 25 30  
 Ser Ala Glu Arg Ala Leu Glu Glu Ala Val Ala Thr Gly Thr Leu Asn  
 35 40 45  
 Leu Ser Asn Arg Arg Leu Lys His Phe Pro Arg Gly Ala Ala Arg Ser  
 50 55 60  
 Tyr Asp Leu Ser Asp Ile Thr Gln Ala Asp Leu Ser Arg Asn Arg Phe  
 65 70 75 80  
 Pro Glu Val Pro Glu Ala Ala Cys Gln Leu Val Ser Leu Glu Gly Leu  
 85 90 95  
 Ser Leu Tyr His Asn Cys Leu Arg Cys Leu Asn Pro Ala Leu Gly Asn  
 100 105 110  
 Leu Thr Ala Leu Thr Tyr Leu Asn Leu Ser Arg Asn Gln Leu Ser Leu  
 115 120 125  
 Leu Pro Pro Tyr Ile Cys Gln Leu Pro Leu Arg Val Leu Ile Val Ser  
 130 135 140  
 Asn Asn Lys Leu Gly Ala Leu Pro Pro Asp Ile Gly Thr Leu Gly Ser  
 145 150 155 160  
 Leu Arg Gln Leu Asp Val Ser Ser Asn Glu Leu Gln Ser Leu Pro Ser  
 165 170 175  
 Glu Leu Cys Gly Leu Ser Ser Leu Arg Asp Leu Asn Val Arg Arg Asn  
 180 185 190  
 Gln Leu Ser Thr Leu Pro Glu Glu Leu Gly Asp Leu Pro Leu Val Arg  
 195 200 205  
 Leu Asp Phe Ser Cys Asn Arg Val Ser Arg Ile Pro Val Ser Phe Cys  
 210 215 220  
 Arg Leu Arg His Leu Gln Val Ile Leu Leu Asp Ser Asn Pro Leu Gln  
 225 230 235 240  
 Ser Pro Pro Ala Gln Val Cys Leu Lys Gly Lys Leu His Ile Phe Lys  
 245 250 255  
 Tyr Leu Ser Thr Glu Ala Gly Gln Arg Gly Ser Ala Leu Gly Asp Leu

260	265	270
Ala Pro Ser Arg Pro Pro Ser Phe Ser Pro Cys Pro Ala Glu Asp Leu		
275	280	285
Phe Pro Gly His Arg Tyr Asp Gly Gly Leu Asp Ser Gly Phe His Ser		
290	295	300
Val Asp Ser Gly Ser Lys Arg Trp Ser Gly Asn Glu Ser Thr Asp Glu		
305	310	315
Phe Ser Glu Leu Ser Phe Arg Ile Ser Glu Leu Ala Arg Glu Pro Arg		
325	330	335
Gly Pro Arg Glu Arg Lys Glu Asp Gly Ser Ala Asp Gly Asp Pro Val		
340	345	350
Gln Ile Asp Phe Ile Asp Ser His Val Pro Gly Glu Asp Glu Glu Arg		
355	360	365
Gly Thr Val Glu Glu Gln Arg Pro Pro Glu Leu Ser Pro Gly Ala Gly		
370	375	380
Asp Arg Glu Arg Ala Pro Ser Ser Arg Arg Glu Glu Pro Ala Gly Glu		
385	390	395
Glu Arg Arg Arg Pro Asp Thr Leu Gln Leu Trp Gln Glu Arg Glu Arg		
405	410	415
Arg Gln Gln Gln Gln Ser Gly Ala Trp Gly Ala Pro Arg Lys Asp Ser		
420	425	430
Leu Leu Lys Pro Gly Leu Arg Ala Val Val Gly Gly Ala Ala Ala Val		
435	440	445
Ser Thr Gln Ala Met His Asn Gly Ser Pro Lys Ser Ser Ala Ser Gln		
450	455	460
Ala Gly Gly Cys Ser Gly Ala Gly Ser Pro Ala Pro Ala Pro Ala Ser		
465	470	475
Gln Glu Pro Leu Pro Ile Ala Gly Pro Ala Thr Ala Pro Ala Pro Arg		
485	490	495
Pro Leu Gly Ser Ile Gln Arg Pro Asn Ser Phe Leu Phe Arg Ser Ser		
500	505	510
Ser Gln Ser Gly Ser Gly Pro Ser Ser Pro Asp Ser Val Leu Arg Pro		
515	520	525
Arg Arg Tyr Pro Gln Val Pro Asp Glu Lys Asp Leu Met Thr Gln Leu		
530	535	540
Arg Gln Val Leu Glu Ser Arg Leu Gln Arg Pro Leu Pro Glu Asp Leu		
545	550	555
Ala Glu Ala Leu Ala Ser Gly Val Ile Leu Cys Gln Leu Ala Asn Gln		
565	570	575
Leu Arg Pro Arg Ser Val Pro Phe Ile His Val Pro Ser Pro Ala Val		
580	585	590
Pro Lys Leu Ser Ala Leu Lys Ala Arg Lys Asn Val Glu Ser Phe Leu		
595	600	605
Glu Ala Cys Arg Lys Met Gly Val Pro Glu Ala Asp Leu Cys Ser Pro		
610	615	620
Ser Asp Leu Leu Gln Gly Thr Ala Arg Gly Leu Arg Thr Ala Leu Glu		
625	630	635
Ala Val Lys Arg Val Gly Gly Lys Ala Leu Pro Pro Leu Trp Pro Pro		
645	650	655
Ser Gly Leu Gly Gly Phe Val Val Phe Tyr Val Val Leu Met Leu Leu		
660	665	670
Leu Tyr Val Thr Tyr Thr Arg Leu Leu Gly Ser		
675	680	

<210> 5565  
 <211> 472  
 <212> DNA  
 <213> Homo sapiens

<400> 5565  
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 60  
 tcacgcggta catgggtac agttccttgt ccgagggctt ccgggagctg gagccgcaca  
 120  
 gaatgaaggg gctcactggt agtggttccc aacttcgttg catattaaac cccccggaga  
 180  
 acttaaaactc cagtgtccag tcctatgcaa tcagatcctg ggtctccact gtgcagcgcc  
 240  
 cgtggagagc cagcgatgtg gagggtcgag atcaccagct tctttgggga caggggtctca  
 300  
 ctgcccccaa ggctggagtc cgggtgtgca atcacggctc acagcagtct cgacctccag  
 360  
 ggctcaagcg atctccagc ctcagcctcc cgagcagctg ggagcacagg cgcataccac  
 420  
 gcgtggcttt tttgagacga gggcttgcca tgtttcccag gctgggtctcg aa  
 472

<210> 5566  
 <211> 76  
 <212> PRT  
 <213> Homo sapiens

<400> 5566  
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 Ala Met Trp Arg Val Glu Ile Thr Gln Phe Phe Gly Asp Arg Val Ser  
 20 25 30  
 Leu Pro Pro Arg Leu Glu Ser Gly Gly Ala Ile Thr Ala His Ser Ser  
 35 40 45  
 Leu Asp Leu Gln Gly Ser Ser Asp Pro Pro Ala Ser Ala Ser Arg Ala  
 50 55 60  
 Ala Gly Ser Thr Gly Ala Tyr His Ala Trp Leu Phe  
 65 70 75

<210> 5567  
 <211> 968  
 <212> DNA  
 <213> Homo sapiens

<400> 5567  
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 aatttcatat gctttttctca tgccacaaaa tattattctt ttgattgtat tcaacctttt  
 120  
 taaaaaacat ttttagctca caagctgtac aaaaacagac ggtgagtaaa ttggcccaca  
 180  
 gaccggtttg ctagcccctg ggcttaagag atctgtccac ttactcctca acatgcagag  
 240

tgtgaactgt gtgaactgca taggccacag caatcttact gcatccattc ccgctgcatc  
 300  
 attatatttg atttgtattc attcagtcca ccgaagcatt cacttggcac ctctccaaat  
 360  
 ctgggtactg tgcaagatcc ttccttggga cactgaagga aaatcagaca cggcccttct  
 420  
 ctcaagttcg cagactctcc ggtatccaga tactacggct ctcatagtat cagaaaacac  
 480  
 agccacaagc gcaggtaagt atcagaggty ttttacgaga tacatgtatc agattcttaa  
 540  
 ggctgctgta ccaaaatacc acaaactgca tggcttaaaa caacagaaat ttattccctc  
 600  
 acaatcctgg aggccagatg tctgaaatca agatattggt agggttgggt ccttctcgag  
 660  
 actctgaggg agaactctgt acatgcctgt tttcctagct tctagtact tctccaatt  
 720  
 cttagggttc tttggctcat agatgcattg ctctaacttc tgccctccatc ttcccatggc  
 780  
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 840  
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 900  
 ccaaataatg tcacacgtgg agattcccag tgaatgtatc tctgggggc cactattcag  
 960  
 cctattac  
 968

&lt;210&gt; 5568

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5568

Met	Gln	Ser	Val	Asn	Cys	Val	Asn	Cys	Ile	Gly	His	Ser	Asn	Leu	Thr
1				5					10					15	
Ala	Ser	Ile	Pro	Ala	Ala	Ser	Leu	Phe	Leu	Ile	Cys	Ile	His	Ser	Val
			20					25					30		
His	Arg	Ser	Ile	His	Leu	Ala	Pro	Leu	Gln	Ile	Trp	Val	Leu	Cys	Lys
		35					40					45			
Ile	Leu	Pro	Trp	Asp	Thr	Glu	Gly	Lys	Ser	Asp	Thr	Ala	Leu	Leu	Ser
	50				55					60					
Ser	Ser	Gln	Thr	Leu	Arg	Tyr	Pro	Asp	Thr	Thr	Ala	Leu	Ile	Val	Ser
65				70					75					80	
Glu	Asn	Thr	Ala	Thr	Ser	Ala	Gly	Lys	Tyr	Gln	Arg	Cys	Phe	Thr	Arg
			85					90					95		
Tyr	Met	Tyr	Gln	Ile	Leu	Lys	Ala	Ala	Val	Pro	Lys	Tyr	His	Lys	Leu
			100				105						110		
His	Gly	Leu	Lys	Gln	Gln	Lys	Phe	Ile	Pro	Ser	Gln	Ser	Trp	Arg	Pro
		115					120						125		
Asp	Val														
		130													

&lt;210&gt; 5569

&lt;211&gt; 876

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5569

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120
ttgcataacc ccgggggacc ccttcctctt ttgtgatgcc ccagaacaat attgatttga
180
ttatagaaag ccaccggcag cctacatgcg caacggtgag ttgttggtta tataactgt
240
ggaccataca gtggaatatt acagtcaata aaaggatatt ttagagagaa aaaaaaacat
300
tggaacacgc ttatgatata atgttaggca aaatcgctgt tatgaacagc tcgtttgggg
360
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420
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480
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540
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600
gaggcatcct ggggctgcac tgctgaccc tttctctctc cctggccctt gactgctgcc
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ttcatgtggc tcagcccttc cgtccttcaa gccttcattc gcttcagggc agccccgagt
720
ctgtgcccag gtacactggc taaaatgcag tgtcttccaa atagccatat ctcttttaat
780
cagggagcaa ttccagcatg gaagtcccca tcatgctcct gctggcaggt acaggtgcc
840
gtttgtgacg gatgaaagca ccgacagccc acgcgt
876

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&lt;210&gt; 5570

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5570

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Thr Ala Arg Leu Gly Gln Ser Lys Ser Trp Glu Val Thr Leu Arg Leu
1      5      10     15
Leu Val Gln Ala Val Glu Tyr Asn Ile Phe Glu Gly Met Glu Cys His
20     25     30
Gly Ser Pro Leu Val Val Ile Ser Gln Gly Lys Ile Val Phe Glu Asp
35     40     45
Gly Asn Ile Asn Val Asn Lys Gly Met Gly Arg Phe Ile Pro Arg Lys
50     55     60
Ala Phe Pro Glu His Ser Ser Thr Trp Leu Glu Leu His Asn His Gly
65     70     75     80
Arg Arg His Val Cys Glu Ala Ser Trp Gly Cys Thr Ala Asp Pro Leu
85     90     95
Leu Ser Pro Leu Ala Leu Ser Ala Ala Phe Met Trp Leu Ser Pro Ser

```



```

      100      105      110
Val Leu Gln Ala Phe Ile Ser Phe Arg Ala Ala Pro Ser Leu Cys Pro
      115      120      125
Gly Thr Leu Ala Lys Met Gln Cys Leu Pro Asn Ser His Ile Ser Phe
      130      135      140
Asn Gln Gly Ala Ile Pro Ala Trp Lys Ser Pro Ser Cys Ser Cys Trp
145      150      155      160
Gln Val Gln Val Pro Val Cys Asp Gly
      165

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<210> 5571  
 <211> 405  
 <212> DNA  
 <213> Homo sapiens

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<400> 5571
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120
aagtttccag aagactttga cgatggagag catgcaaagc agaaatcagt catctcctgg
180
ctgttgaacc acgatccagc aaaacggccc acagccacag aactgctcaa gagtgaagctg
240
ctgccccac cccagatgga ggagtcagag ctgcatgaag tgctgcacca cacgctgacc
300
aacgtggatg ggaaggccta ccgcaccatg atggcccaga tcttctcgca gcgcctcgct
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405

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<210> 5572  
 <211> 135  
 <212> PRT  
 <213> Homo sapiens

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<400> 5572
Asn Gln Lys Val Asp Leu Phe Ser Leu Gly Ile Ile Phe Phe Glu Met
1      5      10      15
Ser Tyr His Pro Met Val Thr Ala Ser Glu Arg Ile Phe Val Leu Asn
      20      25      30
Gln Leu Arg Asp Pro Thr Ser Pro Lys Phe Pro Glu Asp Phe Asp Asp
      35      40      45
Gly Glu His Ala Lys Gln Lys Ser Val Ile Ser Trp Leu Leu Asn His
      50      55      60
Asp Pro Ala Lys Arg Pro Thr Ala Thr Glu Leu Leu Lys Ser Glu Leu
65      70      75      80
Leu Pro Pro Pro Gln Met Glu Glu Ser Glu Leu His Glu Val Leu His
      85      90      95
His Thr Leu Thr Asn Val Asp Gly Lys Ala Tyr Arg Thr Met Met Ala
      100      105      110
Gln Ile Phe Ser Gln Arg Leu Ala Gly Ala Gly Gly Gly Gly Tyr Arg
      115      120      125
Ser Arg Leu Gly Val Pro Arg

```

130

135

&lt;210&gt; 5573

&lt;211&gt; 1279

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5573

naaaaacagg tggaatccgg gctggagccg gagctccggc ggcgcgggtg gcggcacgtc  
60  
cctccagaca gtaccacagg cacctggagt accggcatcg gtcgctgtgg ccccgagtg  
120  
tccgtcagag cctaggggag cctgccctcc cgcgcctcgt cggggcccgg ccaggcacct  
180  
tggccgccgg cgacaggacg cgggcacgag cactagatca cggctgctgg acctcggcac  
240  
gttgacaaga tttctctggg gtaccgcgga ggattacttt gaatttcggt ggtcgcctgt  
300  
ggtctggcat atttagaact taagtctatt atttcgggca ccatgacttt gaggccttta  
360  
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420  
tcccagagct gcagtgtggc agaaatcgag gaggtctctgc aggctggttt agtcccttg  
480  
ggggagtaca gactgcttgg aaggatgttc aggagggatg agaacaggaa agtagcctta  
540  
gtagggctta ctgcggagac tagtcacgcc ctggtcctta aggagatacc gggaaaagg  
600  
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660  
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720  
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780  
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840  
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900  
catactactc agatgataaa ggcgtggcag gtgccagatg tagagaagag aaggcgattg  
960  
ctagagagcc ttcgaggccc agcacttgat gttattcgtg tcctcaagat aaacaatcct  
1020  
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1080  
cctagggagt tgcaggtaa atatctaacc acttaccaga aggatgagga aaagttgtcg  
1140  
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1260  
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1279

&lt;210&gt; 5574

&lt;211&gt; 312

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5574

```

Met Thr Leu Arg Leu Leu Glu Asp Trp Cys Arg Gly Met Asp Met Asn
 1           5           10           15
Pro Arg Lys Ala Leu Leu Ile Ala Gly Ile Ser Gln Ser Cys Ser Val
      20           25           30
Ala Glu Ile Glu Glu Ala Leu Gln Ala Gly Leu Ala Pro Leu Gly Glu
      35           40           45
Tyr Arg Leu Leu Gly Arg Met Phe Arg Arg Asp Glu Asn Arg Lys Val
      50           55           60
Ala Leu Val Gly Leu Thr Ala Glu Thr Ser His Ala Leu Val Pro Lys
      65           70           75           80
Glu Ile Pro Gly Lys Gly Gly Ile Trp Arg Val Ile Phe Lys Pro Pro
      85           90           95
Asp Pro Asp Asn Thr Phe Leu Ser Arg Leu Asn Glu Phe Leu Ala Gly
      100          105          110
Glu Gly Met Thr Val Gly Glu Leu Ser Arg Ala Leu Gly His Glu Asn
      115          120          125
Gly Ser Leu Asp Pro Glu Gln Gly Met Ile Pro Glu Met Trp Ala Pro
      130          135          140
Met Leu Ala Gln Ala Leu Glu Ala Leu Gln Pro Ala Leu Gln Cys Leu
      145          150          155          160
Lys Tyr Lys Lys Leu Arg Val Phe Ser Gly Arg Glu Ser Pro Glu Pro
      165          170          175
Gly Glu Glu Glu Phe Gly Arg Trp Met Phe His Thr Thr Gln Met Ile
      180          185          190
Lys Ala Trp Gln Val Pro Asp Val Glu Lys Arg Arg Arg Leu Leu Glu
      195          200          205
Ser Leu Arg Gly Pro Ala Leu Asp Val Ile Arg Val Leu Lys Ile Asn
      210          215          220
Asn Pro Leu Ile Thr Val Asp Glu Cys Leu Gln Ala Leu Glu Glu Val
      225          230          235          240
Phe Gly Val Thr Asp Asn Pro Arg Glu Leu Gln Val Lys Tyr Leu Thr
      245          250          255
Thr Tyr Gln Lys Asp Glu Glu Lys Leu Ser Ala Tyr Val Leu Arg Leu
      260          265          270
Glu Pro Leu Leu Gln Lys Leu Val Gln Arg Gly Ala Ile Glu Arg Asp
      275          280          285
Ala Val Asn Gln Ala Arg Leu Asp Gln Val Ile Ala Gly Ala Val His
      290          295          300
Lys Thr Ile Arg Arg Glu Leu Asn
      305          310

```

&lt;210&gt; 5575

&lt;211&gt; 2405

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5575

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60

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120  
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420  
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480  
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1080  
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1200  
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1260  
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1620  
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 1860  
 acctcctcag ggcaccagag gactcactca ctgggtgctg tgatgatata cagtgtccct  
 1920  
 ctgccccctt ccatcccca ccacatttga ctgtagcatt gcatctgtgt cctgttgtca  
 1980  
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 2100  
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 2160  
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 2220  
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 2280  
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 2405

<210> 5576

<211> 367

<212> PRT

<213> Homo sapiens

<400> 5576

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Asp	Lys	Ser	Ser	Pro	Val	Glu	Ala	Leu	Lys	Gly	Leu	Val	Asp	Lys	Leu
			20					25					30		
Gln	Ala	Leu	Thr	Gly	Asn	Glu	Gly	Arg	Val	Ser	Val	Glu	Asn	Ile	Lys
		35				40						45			
Gln	Leu	Leu	Gln	Cys	Leu	Val	Pro	Gly	Ser	Thr	Thr	Leu	His	Ser	Ala
	50					55					60				
Glu	Ile	Leu	Ala	Glu	Ile	Ala	Arg	Ile	Leu	Arg	Pro	Gly	Gly	Cys	Leu
65					70				75					80	
Phe	Leu	Lys	Glu	Pro	Val	Glu	Thr	Ala	Val	Asp	Asn	Asn	Ser	Lys	Val
			85					90						95	
Lys	Thr	Ala	Ser	Lys	Leu	Cys	Ser	Ala	Leu	Thr	Leu	Ser	Gly	Leu	Val
		100						105					110		
Glu	Val	Lys	Glu	Leu	Gln	Arg	Glu	Pro	Leu	Thr	Pro	Glu	Glu	Val	Gln
	115					120						125			
Ser	Val	Arg	Glu	His	Leu	Gly	His	Glu	Ser	Asp	Asn	Leu	Leu	Phe	Val
	130					135					140				
Gln	Ile	Thr	Gly	Lys	Lys	Pro	Asn	Phe	Glu	Val	Gly	Ser	Ser	Arg	Gln
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<212> DNA
<213> Homo sapiens
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4760

<210> 5578  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 5578  
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 20 25 30  
 Xaa Glu Ser Leu Pro Glu Gln Leu Pro Val Ala Asp Met Arg Ala Leu  
 35 40 45  
 Leu Thr Gly Lys Asp Cys Pro His Val Arg Glu Lys Gly Ser Gly Lys  
 50 55 60  
 Gln Asn Lys Asp Leu Tyr Glu Leu Ala Phe Ser Ile Ser Tyr Asp Arg  
 65 70 75 80  
 Gly Glu Glu Glu Ala Tyr Leu Asn Phe Ile Ala Pro Ser Lys Arg Glu  
 85 90 95  
 Phe Tyr Leu Trp Thr Asp Gly Leu Ser Ala Leu Leu Gly Ser Pro Met  
 100 105 110  
 Gly Ser Glu Gln Thr Arg Leu Asp Leu Glu Gln Leu Leu Thr Met Glu  
 115 120 125  
 Thr Lys Leu Arg Leu Leu Glu Leu Glu Asn Val Pro Ile Pro Glu Arg  
 130 135 140  
 Pro Pro Pro Val Pro Pro Pro Pro Thr Asn Phe Asn Phe Cys Tyr Asp  
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 Cys Ser Ile Ala Glu Pro  
 165

<210> 5579  
 <211> 1312  
 <212> DNA  
 <213> Homo sapiens

<400> 5579  
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 120  
 cacttactac ctacagctcc aactaccgtg aatgtaacac atcgtccagt aactcaggtg  
 180  
 accacaagac tcctgttacc aagagctcct gcaaaccacc aggtgggttta tacaactctt  
 240  
 cctgcaccac cagctcaggc tcccttgcca ggaactgtta tgcaggctcc tgetgttcgg  
 300  
 caggtcaatc cccaaaatag tgttacagtt cgagtgcctc aaacaaccac atatgttgta  
 360  
 aacaatggac taaccctggg atcaacagga cctcagctca cagtgcacat cagaccacca  
 420  
 caagtgcata ctgagcccc acgccccgtg caccagcac ccttaccaga agctccacaa  
 480  
 ccacagcgtc tgccccaga agctgccagc acatctctgc ctgagaagcc acacttgaag  
 540

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 600  
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 660  
 actgtgccct cacaatggaa aaagattggg gaagtcaagg cacttccctt gcccatggca  
 720  
 tgtactctca cccagtttgt atctggtagc aaatactact ttgcagtagc agccaaggat  
 780  
 atttatggac gttttggggc tttctgtgat cctcagtcaa cagatgtgat ctcttctacc  
 840  
 cagagcagtt aaaccttgga gcctttatat tttcctcttt taaaatttcc accttttggg  
 900  
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 960  
 gacagatgtg tgtatacact acatttggtt ataaccagaa gcaaaataaa ctcagcccac  
 1020  
 aaagctagaa tcttttctcg gacagtttag gctttggggg ttggaaatgt aaatgtgtac  
 1080  
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 1200  
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 1312

&lt;210&gt; 5580

&lt;211&gt; 283

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5580

Thr	Pro	Val	Ser	Thr	Met	Ser	Ser	Ser	Gln	Pro	Val	Ser	Arg	Pro	Leu
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Gln	Pro	Ile	Gln	Pro	Ala	Pro	Pro	Leu	Gln	Pro	Ser	Gly	Val	Pro	Thr
			20					25					30		
Ser	Gly	Pro	Ser	Gln	Thr	Thr	Ile	His	Leu	Leu	Pro	Thr	Ala	Pro	Thr
		35					40					45			
Thr	Val	Asn	Val	Thr	His	Arg	Pro	Val	Thr	Gln	Val	Thr	Thr	Arg	Leu
		50				55					60				
Pro	Val	Pro	Arg	Ala	Pro	Ala	Asn	His	Gln	Val	Val	Tyr	Thr	Thr	Leu
65					70					75					80
Pro	Ala	Pro	Pro	Ala	Gln	Ala	Pro	Leu	Arg	Gly	Thr	Val	Met	Gln	Ala
				85					90					95	
Pro	Ala	Val	Arg	Gln	Val	Asn	Pro	Gln	Asn	Ser	Val	Thr	Val	Arg	Val
			100					105					110		
Pro	Gln	Thr	Thr	Thr	Tyr	Val	Val	Asn	Asn	Gly	Leu	Thr	Leu	Gly	Ser
		115					120					125			
Thr	Gly	Pro	Gln	Leu	Thr	Val	His	His	Arg	Pro	Pro	Gln	Val	His	Thr
		130				135						140			
Glu	Pro	Pro	Arg	Pro	Val	His	Pro	Ala	Pro	Leu	Pro	Glu	Ala	Pro	Gln
145					150					155					160
Pro	Gln	Arg	Leu	Pro	Pro	Glu	Ala	Ala	Ser	Thr	Ser	Leu	Pro	Gln	Lys



```

          165          170          175
Pro His Leu Lys Leu Ala Arg Val Gln Ser Gln Asn Gly Ile Val Leu
          180          185          190
Ser Trp Ser Val Leu Glu Val Asp Arg Ser Cys Ala Thr Val Asp Ser
          195          200          205
Tyr His Leu Tyr Ala Tyr His Glu Glu Pro Ser Ala Thr Val Pro Ser
          210          215          220
Gln Trp Lys Lys Ile Gly Glu Val Lys Ala Leu Pro Leu Pro Met Ala
          225          230          235          240
Cys Thr Leu Thr Gln Phe Val Ser Gly Ser Lys Tyr Tyr Phe Ala Val
          245          250          255
Arg Ala Lys Asp Ile Tyr Gly Arg Phe Gly Pro Phe Cys Asp Pro Gln
          260          265          270
Ser Thr Asp Val Ile Ser Ser Thr Gln Ser Ser
          275          280

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<210> 5581  
 <211> 720  
 <212> DNA  
 <213> Homo sapiens

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<400> 5581
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120
gcgtcccgcg agctgcctgt ctctctgttg caggtcaccg agccgtcaag caagaatctg
180
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240
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300
agtgcagagc actattttcc ggtttcccat ttcacatga tctcacgtac accctgtcct
360
caagataaat cggaacaat caacccaaaa acatgttctc ccaaagaata ttggaaact
420
ttcatctttc ctgttctgct tcccggaatg gctagcctgc ttcaccaagc gaagaaagaa
480
aaatgttttg aggtcagttg tttggcagga tttctttatt ttgagattct caatcattca
540
ttattatcag atgatagctc attatcttgg taccatcagg ttgttctcca gatgaccctc
600
tcgggaggga aagcctgtgt ttggggtcac ttaccagtt ccagccacac catctagtgt
660
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720

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<210> 5582  
 <211> 212  
 <212> PRT  
 <213> Homo sapiens

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<400> 5582
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	20	25	30
Ser Leu Ala Ser Arg Glu Leu Pro Val Ser Ser Trp Gln Val Thr Glu			
	35	40	45
Pro Ser Ser Lys Asn Leu Trp Glu Gln Ile Cys Lys Glu Tyr Glu Ala			
	50	55	60
Glu Gln Pro Pro Phe Pro Glu Gly Tyr Lys Val Lys Gln Glu Pro Val			
65	70	75	80
Ile Thr Val Ala Pro Val Glu Glu Met Leu Phe His Gly Phe Ser Ala			
	85	90	95
Glu His Tyr Phe Pro Val Ser His Phe Thr Met Ile Ser Arg Thr Pro			
	100	105	110
Cys Pro Gln Asp Lys Ser Glu Thr Ile Asn Pro Lys Thr Cys Ser Pro			
	115	120	125
Lys Glu Tyr Leu Glu Thr Phe Ile Phe Pro Val Leu Leu Pro Gly Met			
	130	135	140
Ala Ser Leu Leu His Gln Ala Lys Lys Glu Lys Cys Phe Glu Val Ser			
145	150	155	160
Cys Leu Ala Gly Phe Leu Tyr Phe Glu Ile Leu Asn His Ser Leu Leu			
	165	170	175
Ser Asp Asp Ser Ser Leu Ser Trp Tyr His Gln Val Val Leu Gln Met			
	180	185	190
Thr Pro Ser Gly Gly Lys Ala Cys Val Trp Gly His Leu Pro Ser Ser			
	195	200	205
Ser His Thr Ile			
210			

&lt;210&gt; 5583

&lt;211&gt; 2101

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5583

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120
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180
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240
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300
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360
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420
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480
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540
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600

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720  
cagcagatcc tgcagctctc tgacctgtgg aggctgaccc tccagaagcg tggctgcaag  
780  
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1320  
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1380  
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1560  
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1680  
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2101

&lt;210&gt; 5584

&lt;211&gt; 454

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5584

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Gly Arg Pro His Val Tyr Leu Gln Arg Ile Gln Leu Asn Asn Pro Thr
      20           25           30
Glu Arg Val Ala Ala Leu Gln Thr Val Gly Pro Thr Ala Gly Pro Ala
      35           40           45
Pro Asn Ala Phe Thr Ser Thr Leu Glu Lys Val Gly Asp His Gln Phe
      50           55           60
Leu Leu Tyr Ser Gly Arg Ser Pro Pro Thr Pro Thr Gly Leu Val His
      65           70           75           80
Leu Val Val Val Ala Ala Lys Lys Leu Val Asn Arg Leu Gln Val Ala
      85           90           95
Pro Lys Thr Gln Leu Asp Glu Thr Val Leu Trp Val Val His Val Ser
      100          105          110
Gly Pro Ile Asn Pro Gln Val Leu Lys Ser Lys Ala Ala Lys Glu Leu
      115          120          125
Lys Ala Leu Gln Asp Leu Ala Arg Lys Glu Met Leu Glu Leu Leu Asp
      130          135          140
Met Pro Ala Ala Glu Leu Leu Gln Asp His Gln Leu Leu Trp Ala Gln
      145          150          155          160
Leu Phe Ser Pro Gly Val Glu Met Lys Lys Ile Thr Asp Thr His Thr
      165          170          175
Pro Ser Gly Leu Thr Val Asn Leu Thr Leu Tyr Tyr Met Leu Ser Cys
      180          185          190
Ser Pro Ala Pro Leu Leu Ser Pro Ser Leu Ser His Arg Glu Arg Asp
      195          200          205
Gln Met Glu Ser Thr Leu Asn Tyr Glu Asp His Cys Phe Ser Gly His
      210          215          220
Ala Thr Met His Ala Glu Asn Leu Trp Pro Gly Arg Leu Ser Ser Val
      225          230          235          240
Gln Gln Ile Leu Gln Leu Ser Asp Leu Trp Arg Leu Thr Leu Gln Lys
      245          250          255
Arg Gly Cys Lys Gly Leu Val Lys Val Gly Ala Pro Gly Ile Leu Gln
      260          265          270
Gly Met Val Leu Ser Phe Gly Gly Leu Gln Phe Thr Glu Asn His Leu
      275          280          285
Gln Phe Gln Ala Asp Pro Asp Val Leu His Asn Ser Tyr Ala Leu His
      290          295          300
Gly Ile Arg Tyr Lys Asn Asp His Ile Asn Leu Ala Val Leu Arg Met
      305          310          315          320
Pro Arg Ala Ser Pro Thr Tyr Thr Cys Pro Trp Ser Pro Val Ala Ser
      325          330          335
Leu Ser Xaa Ile Tyr Ala Cys Lys Ala Gly Cys Leu Asp Glu Pro Val
      340          345          350
Glu Leu Thr Ser Ala Pro Thr Gly His Thr Phe Ser Val Met Val Thr
      355          360          365
Gln Pro Ile Thr Pro Leu Leu Tyr Ile Ser Thr Asp Leu Thr His Leu
      370          375          380
Gln Asp Leu Arg His Thr Leu His Leu Lys Ala Ile Leu Ala His Asp

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<210> 5585
<211> 740
<212> DNA
<213> Homo sapiens
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<210> 5586
<211> 87
<212> PRT
<213> Homo sapiens
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4767

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Leu	Leu	Asp	Leu	Gln	Leu	Arg
65			70		75	
Cys	Pro	Ile	Leu	Asp	Leu	Thr
			85			

&lt;210&gt; 5587

&lt;211&gt; 853

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5587

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120
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240
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300
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420
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540
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660
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720
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780
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853

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&lt;210&gt; 5588

&lt;211&gt; 204

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5588

Met	Ala	Pro	Glu	His	Glu	Ile	Pro	Lys	Ile	Gly	Trp	Tyr	Ser	Arg	Phe
1				5				10					15		
Ala	Arg	His	Pro	Phe	Tyr	Gly	Ser	Ala	Gly	Val	Asn	Ser	Gly	Val	Met

20						25						30					
Leu	Met	Asn	Leu	Thr	Arg	Ile	Arg	Ser	Thr	Gln	Phe	Lys	Asn	Ser	Met		
35						40						45					
Ile	Pro	Thr	Gly	Leu	Ala	Trp	Glu	Asp	Met	Leu	Tyr	Pro	Leu	Tyr	Gln		
50						55						60					
Lys	Tyr	Lys	Asn	Ala	Ile	Thr	Trp	Gly	Asp	Gln	Asp	Leu	Leu	Asn	Ile		
65					70				75				80				
Ile	Phe	Tyr	Phe	Asn	Pro	Glu	Cys	Leu	Tyr	Val	Phe	Pro	Cys	Gln	Trp		
			85						90			95					
Asn	Tyr	Arg	Pro	Asp	His	Cys	Met	Tyr	Gly	Ser	Asn	Cys	Arg	Glu	Ala		
			100						105			110					
Glu	His	Glu	Gly	Val	Ser	Val	Leu	His	Gly	Asn	Arg	Gly	Val	Tyr	His		
115						120						125					
Asp	Asp	Lys	Gln	Pro	Thr	Phe	Arg	Ala	Leu	Tyr	Glu	Ala	Ile	Arg	Asp		
130						135						140					
Phe	Pro	Phe	Gln	Asp	Asn	Leu	Phe	Gln	Ser	Met	Tyr	Tyr	Pro	Leu	Gln		
145					150				155				160				
Leu	Lys	Phe	Leu	Glu	Thr	Val	His	Thr	Leu	Cys	Gly	Arg	Ile	Pro	Gln		
			165						170			175					
Val	Phe	Leu	Lys	Gln	Ile	Glu	Lys	Thr	Met	Lys	Arg	Ala	Tyr	Glu	Lys		
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His	Val	Ile	Ile	His	Val	Gly	Pro	Asn	Gln	Met	His						
195						200											

<210> 5589

<211> 1327

<212> DNA

<213> Homo sapiens

<400> 5589

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<211> 207

<212> PRT

<213> Homo sapiens

<400> 5590

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&lt;210&gt; 5591

&lt;211&gt; 2194

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5591

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<211> 580

<212> PRT

<213> Homo sapiens

<400> 5592

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&lt;211&gt; 3078

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5593

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<213> Homo sapiens

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<211> 312

<212> PRT

<213> Homo sapiens

<400> 5598

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&lt;210&gt; 5599

&lt;211&gt; 4492

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5599

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<212> PRT

<213> Homo sapiens

<400> 5600

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4786



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&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5602

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&lt;210&gt; 5603

&lt;211&gt; 2070

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5603

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<212> PRT

<213> Homo sapiens

<400> 5604

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His	Val	Cys	Arg	Pro	Pro	Gly	Asn	Val	Ser	Gln	Val	Val	Phe	His	Asn
	35					40					45				
His	Ser	Asn	Trp	Ser	Leu	Glu	Asp	Thr	Gly	Ala	Leu	Leu	Ser	Ser	Gly
	50					55					60				
Gln	Lys	Asp	Tyr	Val	Thr	Val	Gln	Leu	Gln	Asn	Gly	Glu	Ile	Trp	Glu
65				70					75						80
Leu	Ser	Arg	Cys	Ser	Arg	Asn	Lys	Arg	Glu	Asn	Thr	Ser	Ser	Leu	Gly
			85						90					95	
Tyr	Glu	Tyr	Thr	Gly	Ser	Lys	Lys	Glu	Phe	Pro	Cys	Val	Asp	Gly	Tyr
			100					105					110		
Ile	Tyr	Asp	Gln	Asn	Thr	Trp	Lys	Ser	Thr	Ala	Val	Thr	Gln	Trp	Asn
	115						120					125			
Leu	Val	Cys	Asp	Arg	Lys	Trp	Leu	Ala	Met	Leu	Ile	Gln	Pro	Leu	Phe
	130					135					140				
Met	Phe	Gly	Val	Leu	Leu	Gly	Ser	Val	Thr	Phe	Gly	Tyr	Phe	Ser	Asp
145				150						155					160
Arg	Leu	Gly	Arg	Arg	Val	Val	Leu	Trp	Ala	Thr	Ser	Ser	Ser	Met	Phe
			165						170					175	
Leu	Phe	Gly	Ile	Ala	Ala	Ala	Phe	Ala	Val	Asp	Tyr	Tyr	Thr	Phe	Met
		180					185						190		
Ala	Ala	Arg	Phe	Phe	Leu	Ala	Met	Val	Ala	Ser	Gly	Tyr	Leu	Val	Val
	195						200					205			
Gly	Phe	Val	Tyr	Val	Met	Glu	Phe	Ile	Gly	Met	Lys	Ser	Arg	Thr	Trp
	210					215					220				
Ala	Ser	Val	His	Leu	His	Ser	Phe	Phe	Ala	Val	Gly	Thr	Leu	Leu	Val
225				230						235					240
Ala	Leu	Thr	Gly	Tyr	Leu	Val	Arg	Thr	Trp	Trp	Leu	Tyr	Gln	Met	Ile
			245						250					255	
Leu	Ser	Thr	Val	Thr	Val	Pro	Phe	Ile	Leu	Cys	Cys	Trp	Val	Leu	Pro
		260					265						270		
Glu	Thr	Pro	Phe	Trp	Leu	Leu	Ser	Glu	Gly	Arg	Tyr	Glu	Glu	Ala	Gln
	275						280					285			
Lys	Ile	Val	Asp	Ile	Met	Ala	Lys	Trp	Asn	Arg	Ala	Ser	Ser	Cys	Lys
	290					295					300				
Leu	Ser	Glu	Leu	Leu	Ser	Leu	Asp	Leu	Gln	Gly	Pro	Val	Ser	Asn	Ser
305				310						315					320
Pro	Thr	Glu	Val	Gln	Lys	His	Asn	Leu	Ser	Tyr	Leu	Phe	Tyr	Asn	Trp
			325						330					335	
Ser	Ile	Thr	Lys	Arg	Thr	Leu	Thr	Val	Trp	Leu	Ile	Trp	Phe	Thr	Gly

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<210> 5605
<211> 376
<212> DNA
<213> Homo sapiens
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<210> 5606
<211> 101
<212> PRT
<213> Homo sapiens
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&lt;400&gt; 5606

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 1           5           10           15
Ala His Pro Cys Arg Ala Leu Ala Leu Thr Ala Pro Ile Phe Leu Leu
      20           25           30
Leu Phe Pro Ser Ser Glu Cys Gly Trp Phe Ser Leu Leu Leu Ser Ser
      35           40           45
Asp Val Pro Ser Ser Ser Leu Glu Arg Pro Pro Trp Met Thr Glu Glu
      50           55           60
Val Thr Thr Thr Ser Ser Arg Ser Thr Pro Arg Pro Ser Val Ser Pro
      65           70           75           80
Ser Gln Cys Leu Ala Pro Ser Asn Ile Ala Phe Cys Val Tyr His Gln
      85           90           95
Phe Pro Phe Thr Arg
      100

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&lt;210&gt; 5607

&lt;211&gt; 320

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5607

```

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60
ggtttggggc gacacgcgga aggccgggtg gagcccatcc atgctgtggt gttgcctcga
120
gggaagtgcg tggaccagtg tgtggagacc ctgcagaagc agaccagggt tggcaaggct
180
ggcaccaaca agccccccag gtgccgggga agaggggcca ggccctggggg ccgcccagct
240
cctcggaatg tgtttgactt cctcaatgaa aagctgcaag gtcaggctcc tggggcccta
300
caagccgggc ggccctcagca
320

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&lt;210&gt; 5608

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5608

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Val His Thr Arg Gly Ile Gly Ser Arg Leu Leu Thr Lys Met Gly Tyr
 1           5           10           15
Glu Phe Gly Lys Gly Leu Gly Arg His Ala Glu Gly Arg Val Glu Pro
      20           25           30
Ile His Ala Val Val Leu Pro Arg Gly Lys Ser Leu Asp Gln Cys Val
      35           40           45
Glu Thr Leu Gln Lys Gln Thr Arg Val Gly Lys Ala Gly Thr Asn Lys
      50           55           60
Pro Pro Arg Cys Arg Gly Arg Gly Ala Arg Pro Gly Gly Arg Pro Ala
      65           70           75           80
Pro Arg Asn Val Phe Asp Phe Leu Asn Glu Lys Leu Gln Gly Gln Ala
      85           90           95
Pro Gly Ala Leu Gln Ala Gly Arg Pro Gln

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100

105

&lt;210&gt; 5609

&lt;211&gt; 1843

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5609

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120  
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180  
ttgtctcaat ttaacaatct tgaaaaagac tggaaggtag cctacagtggt tcagttgaca  
240  
taaaaaataga cccgtattga tcatacaaat ctatcatgag aagttaccca gtgagagtga  
300  
gttattgtaa ttctgaatgt actcatcgtg tttctcactt ctacagaagc atcctcagtg  
360  
agttgtattg tgcgagaaaa tgacaccctt gccacatca ctctccattc catagaggga  
420  
cacaacccta tctagccaaa ccagaagaa cgcaggcgct tacacaactt ttctcggaca  
480  
gtcagagaaaa tccaaaagtg ggctttgggc ttaccttaaa taggaatgga atgtaccact  
540  
acgagatggg catcataata aggacattgt tgtttgagcg gggggtgtgc aatcagtata  
600  
aatgaggatg gcggaggaag aggagtgggt actgaaggga ggtggtgcat aataagtga  
660  
cgagctacac aaagctcgag ctacacaaag ctacaggctcc acgggcctcg ccttggtccc  
720  
cagggatgct ctgcagccag cgggcggatg acctgaggtc gggcctgggc ctgtcccttt  
780  
gtgcatgcgg cgtgatttca aattcaaaact aagttccaca ccattaggag ttttcacggc  
840  
atgcagttcc agagtgcaaa tggcttgcat atgtgcagtt tttacaggtg gaaggcaaga  
900  
ccatacatct ctcccacact gggcgtgcct cctagtggac agttgtatgc aagaggcggg  
960  
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1020  
gcctggggcc cagagttggg tgggggggtg ctggtgggag gtgagaaaca agttctggct  
1080  
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1140  
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1200  
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1260  
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1320  
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1380

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 1440  
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 1500  
 tctacagcag aggaagatga aagtaaaagt agcaaataca accaatggcc ttcccatagc  
 1560  
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 1620  
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 1740  
 aantatagtt ttagaatata gtctgatatg acaaagtagg gatttttaaa gcctaacatt  
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<210> 5610

<211> 153

<212> PRT

<213> Homo sapiens

<400> 5610

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Phe	Thr	Ala	Cys	Ser	Ser	Arg	Val	Gln	Met	Ala	Cys	Ile	Cys	Ala	Val
			20					25					30		
Phe	Thr	Gly	Gly	Arg	Gln	Asp	His	Thr	Ser	Leu	Pro	His	Trp	Ala	Cys
		35				40						45			
Leu	Leu	Val	Asp	Ser	Cys	Met	Gln	Glu	Ala	Val	Met	Gly	Ser	Leu	Arg
	50				55					60					
Ile	Pro	Gln	Cys	Gly	Asn	Gly	Pro	Leu	Arg	Leu	Val	Leu	Arg	Val	Pro
65				70					75				80		
Gly	Ala	Gln	Ser	Trp	Val	Gly	Gly	Cys	Trp	Trp	Glu	Val	Arg	Asn	Lys
		85						90					95		
Phe	Trp	Leu	Pro	Ser	Gly	Gln	Leu	Pro	Thr	Ala	Leu	Thr	Trp	Glu	Val
		100						105					110		
Asp	Ala	His	Arg	Gln	Asp	Ala	Leu	Gly	Tyr	Cys	Cys	Thr	Val	Leu	His
	115					120						125			
Glu	Ile	Phe	Ile	Gln	Pro	Thr	Arg	Phe	Asn	Arg	Ser	Leu	Gly	Ser	Ser
	130					135					140				
Ser	Arg	Leu	Leu	Cys	Leu	Phe	Lys	His							
145					150										

<210> 5611

<211> 1152

<212> DNA

<213> Homo sapiens

<400> 5611

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 120

cgggtcctgg cgctcagag cccggccag gccgcggaac ggtgatgctc gggccggacg  
 180  
 ggcgagcgcg gatccctgcg tcccgctgaa aatgtgtgtc tgacatgcaa gctcagtggg  
 240  
 gcagagaccc gtggattgct gtgccctgcc ctccggacct ggatcatgaa ggtgttgga  
 300  
 agaagcttct tctgggtgct gtttcccgtc ctccctggg cgggtgcaggc tgtggagcac  
 360  
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 420  
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 480  
 gcagttctga acaaaactgaa aactgcaatt ggagcagtgg agaaagacgt gggcctgtcg  
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 660  
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 720  
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 780  
 gcccttaaaa atatgcaaca tcaaaaccaa agtttatcca tgcttgacga gattcttgaa  
 840  
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 900  
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 960  
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 1020  
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 1080  
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 1140  
 tggcgaatgta ca  
 1152

&lt;210&gt; 5612

&lt;211&gt; 289

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5612

Met	Lys	Val	Leu	Gly	Arg	Ser	Phe	Phe	Trp	Val	Leu	Phe	Pro	Val	Leu
1				5					10				15		
Pro	Trp	Ala	Val	Gln	Ala	Val	Glu	His	Glu	Glu	Val	Ala	Gln	Arg	Val
		20						25					30		
Ile	Lys	Leu	His	Arg	Gly	Arg	Gly	Val	Ala	Ala	Met	Gln	Ser	Arg	Gln
		35					40					45			
Trp	Val	Arg	Asp	Ser	Cys	Arg	Lys	Leu	Ser	Gly	Leu	Leu	Arg	Gln	Lys
		50				55					60				
Asn	Ala	Val	Leu	Asn	Lys	Leu	Lys	Thr	Ala	Ile	Gly	Ala	Val	Glu	Lys
65				70						75				80	
Asp	Val	Gly	Leu	Ser	Asp	Glu	Glu	Lys	Leu	Phe	Gln	Val	His	Thr	Phe



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<400> 5613
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120
ctcagaccct gtgggggtcaa gtcggcggtg gaggccctag gctcagcctg tggggaccgg
180
cggggactcg gcctgggcag tcctgggaga agctgagccg gctctgctcg aagccagttc
240
tccttgctgc aggtgctggg ggacagcgcg gaggaggggt ccctcgctgc ggcggcggag
300
ctggccgctc agaagcgcgga acagagactg cgcaaattcc gggagctgca cctgatgcgg
360
aatgaagctc gtaaattaaa tcaccaggaa gttgtggaag aagataaaaag actaaaatta
420
cctgcaaatt gggaagccaa aaaagctcgt ttggagtggg aactaaagga agaggaaaaa
480
aaaaaggaat gtgcggcaag aggagaagac tatgagaaag tgaagttgct ggagatcagt
540
gcagaagatg cagaaagatg ggagaggaaa aagaagagga aaaaccctga tctgggattt
600

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tcagattatg ctgctgcccc gttacgccag tatcatcggt tgaccaagca gatcaaacct  
 660  
 gacatggaaa catatgagag actgagagaa aaacatggag aagagttttt cccaacatcc  
 720  
 aatagtcttc ttcattggaac acatgtgcct tccacagagg aaattgacag gatggtcata  
 780  
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 840  
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 900  
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 960  
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 1080  
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 1560  
 ggagtgtgct accgacgtcg aatatccatg cagactagaa aaccattat ctcagcccaa  
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 1679

&lt;210&gt; 5614

&lt;211&gt; 242

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5614

Ser	Gln	Phe	Ser	Leu	Ser	Gln	Val	Leu	Val	Asp	Ser	Ala	Glu	Glu	Gly
1			5					10					15		
Ser	Leu	Ala	Ala	Ala	Ala	Glu	Leu	Ala	Ala	Gln	Lys	Arg	Glu	Gln	Arg
		20					25					30			
Leu	Arg	Lys	Phe	Arg	Glu	Leu	His	Leu	Met	Arg	Asn	Glu	Ala	Arg	Lys
	35					40				45					
Leu	Asn	His	Gln	Glu	Val	Val	Glu	Glu	Asp	Lys	Arg	Leu	Lys	Leu	Pro
	50				55				60						
Ala	Asn	Trp	Glu	Ala	Lys	Lys	Ala	Arg	Leu	Glu	Trp	Glu	Leu	Lys	Glu
65			70					75					80		
Glu	Glu	Lys	Lys	Lys	Glu	Cys	Ala	Ala	Arg	Gly	Glu	Asp	Tyr	Glu	Lys

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<400> 5615
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120
ccacagactg ttcccttcaca accgtccagt agtactgtcc ctccctccacc acacagacct
180
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240
tggtcatga tgcagtcta catggatcct cgaatgatgt caggaagacc tgctatggat
300
attccacca ttcatcctgg aatgattcct cctaaacat taatgagaag agaccagatg
360
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420
gcaatttccc tttctgagcc tcgtatgctg tgggggtcag atccctatcc tcatgctgag
480
cctcaacaag caactactcc caaagcaaca gaagagcctg aggatgtaag gtctgaagct
540
gcgttggacc aggaacagat tactgctgct tattctgtag aacataatca attagaggct
600
cacccaaagg cagactttat cagagaatca agtgaggcac aagtacaaaa gtttttaagg
660
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720
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780

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 900  
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 960  
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 1020  
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 1080  
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&lt;210&gt; 5616

&lt;211&gt; 507

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5616

Pro	Ala	Val	Leu	Ser	Gly	Tyr	Phe	Lys	Gln	Phe	Gln	Lys	Ser	Leu	Pro
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Pro	Arg	Phe	Gln	Arg	Gln	Gln	Glu	Gln	Met	Lys	Gln	Gln	Gln	Trp	Gln
	20						25					30			
Gln	Gln	Gln	Gln	Gln	Gly	Val	Leu	Pro	Gln	Thr	Val	Pro	Ser	Gln	Pro
	35				40						45				
Ser	Ser	Ser	Thr	Val	Pro	Pro	Pro	Pro	His	Arg	Pro	Leu	Tyr	Gln	Pro
50					55				60						
Met	Gln	Pro	His	Pro	Gln	His	Leu	Ala	Ser	Met	Gly	Phe	Asp	Pro	Arg
65				70				75						80	
Trp	Leu	Met	Met	Gln	Ser	Tyr	Met	Asp	Pro	Arg	Met	Met	Ser	Gly	Arg
			85					90						95	
Pro	Ala	Met	Asp	Ile	Pro	Pro	Ile	His	Pro	Gly	Met	Ile	Pro	Pro	Lys
	100						105					110			
Pro	Leu	Met	Arg	Arg	Asp	Gln	Met	Glu	Gly	Ser	Pro	Asn	Ser	Ser	Glu
	115					120						125			
Ser	Phe	Glu	His	Ile	Ala	Arg	Ser	Ala	Arg	Asp	His	Ala	Ile	Ser	Leu
130					135					140					
Ser	Glu	Pro	Arg	Met	Leu	Trp	Gly	Ser	Asp	Pro	Tyr	Pro	His	Ala	Glu
145					150				155					160	
Pro	Gln	Gln	Ala	Thr	Thr	Pro	Lys	Ala	Thr	Glu	Glu	Pro	Glu	Asp	Val

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<210> 5617
<211> 3480
<212> DNA
<213> Homo sapiens
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4799

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240  
accactgtaa atgaaatgag taccagatat taccagaatg agagaagaca caactatacc  
300  
accccaaaga gttttctaga acaaatatca ctgtttaaga acctgttgaa gaagaagcaa  
360  
aatgaggtat ccgagaaaaa agaacgcctg gtgaacggca tccaaaagct aaaaaccaca  
420  
gcctctcagg tgggagatct aaaagccaga cttgcctctc aagaagccga gctgcaactg  
480  
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3360

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 3480

<210> 5618

<211> 1003

<212> PRT

<213> Homo sapiens

<400> 5618

His	Lys	Asp	Ser	Ile	Ser	Leu	Phe	Met	Ala	His	Val	His	Thr	Thr	Val
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Asn	Glu	Met	Ser	Thr	Arg	Tyr	Tyr	Gln	Asn	Glu	Arg	Arg	His	Asn	Tyr
			20					25					30		
Thr	Thr	Pro	Lys	Ser	Phe	Leu	Glu	Gln	Ile	Ser	Leu	Phe	Lys	Asn	Leu
			35				40					45			
Leu	Lys	Lys	Lys	Gln	Asn	Glu	Val	Ser	Glu	Lys	Lys	Glu	Arg	Leu	Val
	50				55					60					
Asn	Gly	Ile	Gln	Lys	Leu	Lys	Thr	Thr	Ala	Ser	Gln	Val	Gly	Asp	Leu
65					70					75				80	
Lys	Ala	Arg	Leu	Ala	Ser	Gln	Glu	Ala	Glu	Leu	Gln	Leu	Arg	Asn	His
				85					90					95	
Asp	Ala	Glu	Ala	Leu	Ile	Thr	Lys	Ile	Gly	Leu	Gln	Thr	Glu	Lys	Val
			100					105				110			
Ser	Arg	Glu	Lys	Thr	Ile	Ala	Asp	Ala	Glu	Glu	Arg	Lys	Val	Thr	Ala
			115				120					125			
Ile	Gln	Thr	Glu	Val	Phe	Gln	Lys	Gln	Arg	Glu	Cys	Glu	Ala	Asp	Leu
	130					135					140				
Leu	Lys	Ala	Glu	Pro	Ala	Leu	Val	Ala	Ala	Thr	Ala	Ala	Leu	Asn	Thr
145					150					155				160	
Leu	Asn	Arg	Val	Asn	Leu	Ser	Glu	Leu	Lys	Ala	Phe	Pro	Asn	Pro	Pro
				165					170					175	
Ile	Ala	Val	Thr	Asn	Val	Thr	Ala	Ala	Val	Met	Val	Leu	Leu	Ala	Pro
			180					185					190		
Arg	Gly	Arg	Val	Pro	Lys	Asp	Arg	Ser	Trp	Lys	Ala	Ala	Lys	Val	Phe
		195				200						205			
Met	Gly	Lys	Val	Asp	Asp	Phe	Leu	Gln	Ala	Leu	Ile	Asn	Tyr	Asp	Lys
	210					215						220			
Glu	His	Ile	Pro	Glu	Asn	Cys	Leu	Lys	Val	Val	Asn	Glu	His	Tyr	Leu
225					230					235					240
Lys	Asp	Pro	Glu	Phe	Asn	Pro	Asn	Leu	Ile	Arg	Thr	Lys	Ser	Phe	Ala
				245					250					255	
Ala	Ala	Gly	Leu	Cys	Ala	Trp	Val	Ile	Asn	Ile	Ile	Lys	Phe	Tyr	Glu
			260					265					270		
Val	Tyr	Cys	Asp	Val	Glu	Pro	Lys	Arg	Gln	Ala	Leu	Ala	Gln	Ala	Asn
		275					280					285			
Leu	Glu	Leu	Ala	Ala	Ala	Thr	Glu	Lys	Leu	Glu	Ala	Ile	Arg	Lys	Lys
	290					295					300				
Leu	Val	Val	Ser	Ala	Asn	Tyr	Asp	Ile	Glu	Lys	Ser	Glu	Lys	Ile	Arg
305					310					315					320
Trp	Gly	Gln	Ser	Ile	Lys	Ser	Phe	Glu	Ala	Gln	Glu	Lys	Thr	Leu	Cys
				325					330					335	
Gly	Asp	Val	Leu	Leu	Thr	Ala	Ala	Phe	Val	Ser	Tyr	Val	Gly	Pro	Phe



4803

```

      770              775              780
Trp Val Glu Ser Glu Cys Pro Glu Lys Glu Lys Leu Pro Gln Glu Trp
785              790              795              800
Lys Lys Lys Ser Leu Ile Gln Lys Leu Ile Leu Leu Arg Ala Met Arg
      805              810              815
Pro Asp Arg Met Thr Tyr Ala Leu Arg Asn Phe Val Glu Glu Lys Leu
      820              825              830
Gly Ala Lys Tyr Val Glu Arg Thr Arg Leu Asp Leu Val Lys Ala Phe
      835              840              845
Glu Glu Ser Ser Pro Ala Thr Pro Ile Phe Phe Ile Leu Ser Pro Gly
      850              855              860
Val Asp Ala Leu Lys Asp Leu Glu Ile Leu Gly Lys Arg Leu Gly Phe
865              870              875              880
Thr Ile Asp Ser Gly Lys Phe His Asn Val Ser Leu Gly Gln Gly Gln
      885              890              895
Glu Thr Val Ala Glu Val Ala Leu Glu Lys Ala Ser Lys Gly Gly His
      900              905              910
Trp Val Ile Leu Gln Asn Val His Leu Val Ala Lys Trp Leu Gly Thr
      915              920              925
Leu Glu Lys Leu Leu Glu Arg Phe Ser Gln Gly Ser His Arg Asp Tyr
      930              935              940
Arg Val Phe Met Ser Ala Glu Ser Ala Pro Thr Pro Asp Glu His Ile
945              950              955              960
Ile Pro Gln Gly Leu Leu Glu Asn Ser Ile Lys Ile Thr Asn Glu Pro
      965              970              975
Pro Thr Gly Met Leu Ala Asn Leu His Ala Ala Leu Tyr Asn Phe Asp
      980              985              990
Gln Val Arg Lys Arg Ser Arg Leu Gly Arg Gln
      995              1000

```

&lt;210&gt; 5619

&lt;211&gt; 1219

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5619

```

aagccggaga gctggagctt tgaagccacc ccggtcaaag gatgctgagt ccggagcgcc
60
tagccctacc ggactacgag tatctggctc agcgacatgt cctcacctac atggaggatg
120
cagtgtgcca gctgctagaa aacaggggaag atattagcca atatggaatt gccaggttct
180
tcaactgaata ttttaacagt gtatgccagg gaacacacat tctctttcga gaattcagct
240
tcgtccaagc cccccccac aataggggtat catttttacg ggccttctgg agatgcttcc
300
gaactgtggg caaaaatggc gatttgtctga ccatgaaaga atatcactgt ttgctgcaat
360
tactgtgtcc tgatttcccg ctggagctca ctcagaaagc agccaggatt gtgctcatgg
420
acgatgccat ggactgcttg atgtcttttt cagatttccct ctttgccctc cagatccagt
480
tttactactc agaattcctg gacagtgtgg ctgccatcta tgaggacctg ctgtcaggca
540

```

agaaccccaa cacagtgatt gtgccgacgt cgtccagtgg gcagcaccgc caacgaacctg  
 600  
 ccttggggcgg ggccggcacg ctggagggcg tggaggcgtc gctgttctac cagtgtctgg  
 660  
 aaaacctgtg tgatcggcac aagtacagct gcccaccccc agcacttgtc aaagaggccc  
 720  
 tcagcaatgt tcagagactg accttctatg gattcctcat ggctctctca aagcaccgtg  
 780  
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 840  
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 900  
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 960  
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 1020  
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 1080  
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 1140  
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 1200  
 agaccttttt tccaagctg  
 1219

&lt;210&gt; 5620

&lt;211&gt; 333

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5620

Met Leu Ser Pro Glu Arg Leu Ala Leu Pro Asp Tyr Glu Tyr Leu Ala  
 1 5 10 15  
 Gln Arg His Val Leu Thr Tyr Met Glu Asp Ala Val Cys Gln Leu Leu  
 20 25 30  
 Glu Asn Arg Glu Asp Ile Ser Gln Tyr Gly Ile Ala Arg Phe Phe Thr  
 35 40 45  
 Glu Tyr Phe Asn Ser Val Cys Gln Gly Thr His Ile Leu Phe Arg Glu  
 50 55 60  
 Phe Ser Phe Val Gln Ala Thr Pro His Asn Arg Val Ser Phe Leu Arg  
 65 70 75 80  
 Ala Phe Trp Arg Cys Phe Arg Thr Val Gly Lys Asn Gly Asp Leu Leu  
 85 90 95  
 Thr Met Lys Glu Tyr His Cys Leu Leu Gln Leu Leu Cys Pro Asp Phe  
 100 105 110  
 Pro Leu Glu Leu Thr Gln Lys Ala Ala Arg Ile Val Leu Met Asp Asp  
 115 120 125  
 Ala Met Asp Cys Leu Met Ser Phe Ser Asp Phe Leu Phe Ala Phe Gln  
 130 135 140  
 Ile Gln Phe Tyr Tyr Ser Glu Phe Leu Asp Ser Val Ala Ala Ile Tyr  
 145 150 155 160  
 Glu Asp Leu Leu Ser Gly Lys Asn Pro Asn Thr Val Ile Val Pro Thr  
 165 170 175  
 Ser Ser Ser Gly Gln His Arg Gln Arg Pro Ala Leu Gly Gly Ala Gly

```

      180      185      190
Thr Leu Glu Gly Val Glu Ala Ser Leu Phe Tyr Gln Cys Leu Glu Asn
      195      200      205
Leu Cys Asp Arg His Lys Tyr Ser Cys Pro Pro Pro Ala Leu Val Lys
      210      215      220
Glu Ala Leu Ser Asn Val Gln Arg Leu Thr Phe Tyr Gly Phe Leu Met
      225      230      235      240
Ala Leu Ser Lys His Arg Gly Ile Asn Gln Ala Leu Gly Lys Ser Glu
      245      250      255
Leu Ser Ser Arg Gln Pro Leu Leu Pro His Asn Thr Gly Ser Ser Trp
      260      265      270
Pro Leu Leu Ala Thr Arg Leu Gln Arg Gly Arg Gly Ile Thr Ile Ser
      275      280      285
Ala Leu Thr Ser Gln Gly Arg Thr Gln Ser Gln Gly Ala Gly Ile Trp
      290      295      300
Arg Gln Asn Met Ala Leu Thr His Ser His Gly Arg Gly Gln Pro Ser
      305      310      315      320
Leu Pro Ala Ala Leu Pro Gln His Glu Thr Thr Ser Pro
      325      330

```

&lt;210&gt; 5621

&lt;211&gt; 456

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5621

```

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gccggccggg ctcacatggt ttgtacaata aatacatctg tggggcgggc tctccgcagc
120
cggaagggc caccgccacg gttcagtcca gttccgggc tcccagcttc atggggccct
180
tggccacctt cctctcggcg cgtttggcct ccactctccg ccgcccgtcc tcgcgcttct
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300
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360
accgtcagga ggtggtcctt gggagcttgg ctgaaccctg ggcggtggcc cttcccggt
420
gcggagagcc cgccccacag atgtatttat tgtaca
456

```

&lt;210&gt; 5622

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5622

```

Met Ala Trp Leu Gly Arg Pro Gly Ser His Gly Leu Tyr Asn Lys Tyr
  1          5          10          15
Ile Cys Gly Ala Gly Ser Pro Gln Pro Gly Arg Ala Thr Ala Thr Val
      20      25      30
Gln Ser Ser Phe Arg Ala Pro Ser Phe Met Gly Pro Leu Ala Thr Phe

```

```

      35          40          45
Leu Ser Ala Arg Leu Ala Ser Ile Ser Arg Arg Arg Ser Ser Arg Phe
      50          55          60
Phe Arg Ala Ser Ser Ala Leu Thr Cys Pro Gly Cys Trp Asp Val Gln
65          70          75          80
Thr Gly

```

&lt;210&gt; 5623

&lt;211&gt; 357

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5623

```

nctggaagaa ctcgtcatgc tctttgtagc gtggtgcttc tgttgctcac aggacaactt
60
gcctttgatg attttcaaga gagttgtgct atgatgtggc aaaagtatgc aggaagcagg
120
cgggtcaatgc ctctgggagc aaggatcctt ttccacggtg tgttctatgc cgggggcttt
180
gccattgtgt attacctcat tcaaaagttt cattccaggg ctttatatta caagtggga
240
gtggagcagc tgcagagcca tcccaggca caggaagctc tgggccctcc tctcaacatc
300
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357

```

&lt;210&gt; 5624

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5624

```

Met Trp Gln Lys Tyr Ala Gly Ser Arg Arg Ser Met Pro Leu Gly Ala
 1          5          10          15
Arg Ile Leu Phe His Gly Val Phe Tyr Ala Gly Gly Phe Ala Ile Val
      20          25          30
Tyr Tyr Leu Ile Gln Lys Phe His Ser Arg Ala Leu Tyr Tyr Lys Leu
      35          40          45
Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu Gly
      50          55          60
Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn Phe
65          70          75          80
Val Asp Ile Val Asp Ala Lys Leu
      85

```

&lt;210&gt; 5625

&lt;211&gt; 1017

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5625

```

gccgactcgt ggtacctggc gcttctgggc ttcgctgagc acttccgcac ttccagcccg
60

```

cccaaaatcc gcctgtgcgt gcactgcctg caggccgtgt tccccttcaa gccgccgcag  
 120  
 cgcacgcagg cccgtacaca cctgcagctg ggctccgttc tctatcacca caccaagaac  
 180  
 agcgagcagg cgcgagacca cctggagaag gcgtgggtga tatcacagca aatcccacag  
 240  
 ttcgaagatg ttaaatttga agcagcaagt ctgttgctg aattgtactg tcaagagaat  
 300  
 tccgttgatg cagcaaagcc gctgctgcgg aaggcgatcc agatctcaca gcagacccca  
 360  
 tattggcact gccgcctgct ctccagctc gctcaactgc acacgcttga gaaggacctg  
 420  
 gtgtcggcct gtgacctcct ggggtgtaggg gccgagtacg cccgggtggt gggatctgaa  
 480  
 tacacacggg cgctgttctt cctcagcaag gggatgctgc tgctgatgga gcgaaagctg  
 540  
 caggaggtgc acccgctgct gacctctgc gggcagatcg tggagaactg gcaggggaac  
 600  
 cccatccaga aggagtcgct gcgtgtcttc ttctgggtgc tccaggtcac ccactatctg  
 660  
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 720  
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 900  
 aagctcaaga tgctggactg cagccccatc ctgtcatcct tccaagtgat cctgctggag  
 960  
 cacatcatca tgtgccgcct tgtcacgggt cacaaggcca cggcgctgca ggagatc  
 1017

&lt;210&gt; 5626

&lt;211&gt; 339

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5626

Ala	Asp	Ser	Trp	Tyr	Leu	Ala	Leu	Leu	Gly	Phe	Ala	Glu	His	Phe	Arg
1				5					10					15	
Thr	Ser	Ser	Pro	Pro	Lys	Ile	Arg	Leu	Cys	Val	His	Cys	Leu	Gln	Ala
			20					25					30		
Val	Phe	Pro	Phe	Lys	Pro	Pro	Gln	Arg	Ile	Glu	Ala	Arg	Thr	His	Leu
			35				40					45			
Gln	Leu	Gly	Ser	Val	Leu	Tyr	His	His	Thr	Lys	Asn	Ser	Glu	Gln	Ala
			50			55					60				
Arg	Ser	His	Leu	Glu	Lys	Ala	Trp	Leu	Ile	Ser	Gln	Gln	Ile	Pro	Gln
65					70				75					80	
Phe	Glu	Asp	Val	Lys	Phe	Glu	Ala	Ala	Ser	Leu	Leu	Ser	Glu	Leu	Tyr
			85					90					95		
Cys	Gln	Glu	Asn	Ser	Val	Asp	Ala	Lys	Pro	Leu	Leu	Arg	Lys	Ala	
			100					105				110			
Ile	Gln	Ile	Ser	Gln	Gln	Thr	Pro	Tyr	Trp	His	Cys	Arg	Leu	Leu	Phe

115	120	125
Gln Leu Ala Gln Leu His Thr Leu Glu Lys Asp Leu Val Ser Ala Cys		
130	135	140
Asp Leu Leu Gly Val Gly Ala Glu Tyr Ala Arg Val Val Gly Ser Glu		
145	150	155
Tyr Thr Arg Ala Leu Phe Leu Leu Ser Lys Gly Met Leu Leu Leu Met		
165	170	175
Glu Arg Lys Leu Gln Glu Val His Pro Leu Leu Thr Leu Cys Gly Gln		
180	185	190
Ile Val Glu Asn Trp Gln Gly Asn Pro Ile Gln Lys Glu Ser Leu Arg		
195	200	205
Val Phe Phe Leu Val Leu Gln Val Thr His Tyr Leu Asp Ala Gly Gln		
210	215	220
Val Lys Ser Val Lys Pro Cys Leu Lys Gln Leu Gln Gln Cys Ile Gln		
225	230	235
Thr Ile Ser Thr Leu His Asp Asp Glu Ile Leu Pro Ser Asn Pro Ala		
245	250	255
Asp Leu Phe His Trp Leu Pro Lys Glu His Met Cys Val Leu Val Tyr		
260	265	270
Leu Val Thr Val Met His Ser Met Gln Ala Gly Tyr Leu Glu Lys Ala		
275	280	285
Gln Lys Tyr Thr Asp Lys Ala Leu Met Gln Leu Glu Lys Leu Lys Met		
290	295	300
Leu Asp Cys Ser Pro Ile Leu Ser Ser Phe Gln Val Ile Leu Leu Glu		
305	310	315
His Ile Ile Met Cys Arg Leu Val Thr Gly His Lys Ala Thr Ala Leu		
325	330	335
Gln Glu Ile		

&lt;210&gt; 5627

&lt;211&gt; 1401

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5627

```

nctctcacac tgtggaattc tctctatcag cctcaaagtc cagatttgga aaggaggtct
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120
aagagccagg gttatgtgca catgggaggt ggggaggaca ggggctgtat gtgacctca
180
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240
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300
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360
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420
ggcagtgata gtggcatctc cgaagacctc ccctccgacc ccaggacac ccctccacgc
480
agcggaccag ccacctcccc cgccggctgc catctgccc agcctggcaa ggggccctgc
540

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ctctctatc atcctggcaa ctcttgctcc accacaaccc cagggccagt gatccaacaa  
 600  
 cagcatcacc tgggggcctc ctacctctg cgacctgggg ctgggcactg tcaggagctg  
 660  
 gtgctcaccg aggatgagaa gaagctgctg gctaaagaag gcatcaccct gccactcag  
 720  
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 780  
 aagcagtcgg cgcaagaaag caggaagaag aagaaggaat atatcgatgg cctgggagact  
 840  
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 900  
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 960  
 acgatgctgc ctcccgctg gctgctgatg ctgtgccagg ctccgaggcc ccaggacccc  
 1020  
 gacccgaggc tgacacaacc cgagaagagt ctccaggaag ccccggggca gactggggct  
 1080  
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 1140  
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 1200  
 cgagcactgg ctcaggacgt gcagggctgg aggcggcggg agacgagctg tgagccccac  
 1260  
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 1401

<210> 5628

<211> 299

<212> PRT

<213> Homo sapiens

<400> 5628

Met	Ala	Ser	Ala	Ala	Cys	Ser	Met	Asp	Pro	Ile	Asp	Ser	Phe	Glu	Leu
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Leu	Asp	Leu	Leu	Phe	Asp	Arg	Gln	Asp	Gly	Ile	Leu	Arg	His	Val	Glu
		20						25					30		
Leu	Gly	Glu	Gly	Trp	Gly	His	Val	Lys	Asp	Gln	Val	Leu	Pro	Asn	Pro
	35					40						45			
Asp	Ser	Asp	Asp	Phe	Leu	Ser	Ser	Ile	Leu	Gly	Ser	Gly	Asp	Ser	Leu
	50					55					60				
Pro	Ser	Ser	Pro	Leu	Trp	Ser	Pro	Glu	Gly	Ser	Asp	Ser	Gly	Ile	Ser
65				70					75					80	
Glu	Asp	Leu	Pro	Ser	Asp	Pro	Gln	Asp	Thr	Pro	Pro	Arg	Ser	Gly	Pro
			85					90					95		
Ala	Thr	Ser	Pro	Ala	Gly	Cys	His	Pro	Ala	Gln	Pro	Gly	Lys	Gly	Pro
		100					105					110			
Cys	Leu	Ser	Tyr	His	Pro	Gly	Asn	Ser	Cys	Ser	Thr	Thr	Thr	Pro	Gly
	115					120					125				
Pro	Val	Ile	Gln	Gln	Gln	His	His	Leu	Gly	Ala	Ser	Tyr	Leu	Leu	Arg



```

      130              135              140
Pro Gly Ala Gly His Cys Gln Glu Leu Val Leu Thr Glu Asp Glu Lys
145              150              155              160
Lys Leu Leu Ala Lys Glu Gly Ile Thr Leu Pro Thr Gln Leu Pro Leu
      165              170              175
Thr Lys Tyr Glu Glu Arg Val Leu Lys Lys Ile Arg Arg Lys Ile Arg
      180              185              190
Asn Lys Gln Ser Ala Gln Glu Ser Arg Lys Lys Lys Lys Glu Tyr Ile
      195              200              205
Asp Gly Leu Glu Thr Arg Ser Cys Cys Cys Pro Leu Pro Ser Ser Ser
      210              215              220
Ser Pro Pro Ser Ala Leu Leu Ala Pro Thr Lys Pro Arg Ala Leu Gly
225              230              235              240
Thr Leu Arg Leu Tyr Glu Cys Ser Pro Glu Leu Cys Thr Thr Met Leu
      245              250              255
Pro Pro Ala Trp Leu Leu Met Leu Cys Gln Ala Pro Arg Pro Gln Asp
      260              265              270
Pro Asp Pro Arg Leu Thr Gln Pro Glu Lys Ser Leu Gln Glu Ala Pro
      275              280              285
Gly Gln Thr Gly Ala Ser Arg Thr Pro Arg Thr
      290              295

```

&lt;210&gt; 5629

&lt;211&gt; 428

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5629

```

gtgcacgacc ccactgaatc atcccacaac catggatggg agacacactc agtctccttt
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aacagaagat aaagctgggg cttacagaga atgtacaact tggcccaggg cacaccagtt
120
agccatcagg ggcagngctg ctattcaggt ctgggactgt gggactccag agcccatgtt
180
ttttacgagg atgccatact gccacaatgg atggtgtctt tatctcctga tatatgattg
240
tgtgttgga ggcgtgggg ggcagctgga agaattggaga ggcataatttg tggaggatct
300
tccccattc tctgctaccc tctcttgag ctcccagttc catctgagaa attatctact
360
ctgagaaatc gtcacaacac agcatgggtg tgagtgcagt ggcagaagcc tgtgctggt
420
tgtatggg
428

```

&lt;210&gt; 5630

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5630

```

Met Asp Gly Arg His Thr Gln Ser Pro Leu Thr Glu Asp Lys Ala Gly
1              5              10              15
Ala Tyr Arg Glu Cys Thr Thr Trp Pro Arg Ala His Gln Leu Ala Ile

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<400> 5632  
Met Gly Val Pro Trp Ala Trp Arg Arg Gln Gln Glu Gly Val Thr Gly

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1           5           10           15
Ala Gly Ala Gly Ala Gly His Leu Thr Pro Gln Ala Ser Pro Thr Ser
20           25           30
Glu Leu Pro Thr Ala Lys Thr Pro Gly Glu Ala Gly Arg Gly Gly Val
35           40           45
Arg Gly Lys Glu Gly Leu Cys Glu Ser Lys Pro His Pro Gln Ser Arg
50           55           60
Ala Glu Thr Gln Val Cys Lys Ser His Pro Pro Pro Thr Ser Ser Ser
65           70           75           80
Phe Glu Ala Ser Ser Thr Arg Gly Arg Ala Gly Ala Ala Gln Arg Pro
85           90           95
Glu Lys Gly Lys Pro His Arg Arg Lys Leu Lys Ala Ser Val Pro Cys
100          105          110
Val Ser Ala Glu Arg Val Asn Gly Pro Lys Gly Ser Ser Leu Gln Thr
115          120          125
Ala Arg Ile His Pro Thr Gly Gly His Arg Thr Arg Pro Gly Pro Ser
130          135          140
Ala Ser Val Pro Val Gln Pro Thr Pro Val Gln Pro Gly Ala Leu Ser
145          150          155          160
Asp Leu Thr Thr Arg Val Pro Ser Thr Cys Val His Thr Gln Met Gln
165          170          175
Glu Arg Thr His Thr Thr Val
180

```

&lt;210&gt; 5633

&lt;211&gt; 2181

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5633

```

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60
tgtcacctcc gtgtccca tagatgccag gctctgcttc tgtggttctg gaggtcatta
120
gtcaattgta tgtggtgctg tctgtcctcc tgattgcaga ggaggaagga accccttaaa
180
tgagcgggtt ctgagtgtg gggccgtggt tctgctctgc ctggtgggat tctccagtgc
240
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300
aatccatccc tagagttcac aggagatcta gggcagagtt tccaagctgc agctgctctg
360
gccctgtgtg agctgctgct ctgaggaagc ccagggctga ggtagctacc aggcggaggc
420
tgggtttgga ggcctccaca tcaggaatt gagcggtagg ggtttcagcc ttcacgttgg
480
tcgccgact gtatgggaag tgggtctgtg ggtctgcttg ccagctctca cgtcctctt
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600
ctggtggtca tcgagggcat gggcgtgct gtccacacaa actaccacgc agccctgcgc
660
tgcgagagcc tcaagctggc cgtcatcaag aacgcgtggc tggccgagcg gctgggcggc
720

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cggtctttca gcgccatctt caagtacgag gtcccagccg agtgaggcgc tgcagctgcc  
780  
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840  
atgtgcctta attttcgcag ataacagggg gaatagacat ctttttggga gtcttccctt  
900  
ttgtcaggga gctactcctt agagggacag aggtcatcct ggcgtgcaac tcaggccccg  
960  
ccctgaacga cgtgaccac agcgagtccc tcatcgtggc agagcgtatt gcgggcatgg  
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1080  
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1860  
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1980  
tgcgtgtgac ccagaggcga gacgcagctt tgtcctggga gacgttcata ttggaatcta  
2040  
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2160  
aaaaaactct atttgggtgc t  
2181

&lt;210&gt; 5634

&lt;211&gt; 289

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5634

```

Pro Thr Ala Ser Pro Ser Ser Trp Gln Ser Val Leu Arg Ala Trp Thr
 1              5              10              15
Leu Thr Val Arg Ser Leu Leu Asp Thr Arg Glu His Cys Leu Asn Glu
      20              25              30
Phe Asn Phe Pro Asp Pro Tyr Ser Lys Val Lys Gln Arg Glu Asn Gly
      35              40              45
Val Ala Leu Arg Cys Phe Pro Gly Val Val Arg Ser Leu Asp Ala Leu
 50              55              60
Gly Trp Glu Glu Arg Gln Leu Ala Leu Val Lys Gly Leu Leu Ala Gly
65              70              75              80
Asn Val Phe Asp Trp Gly Ala Lys Ala Val Ser Ala Val Leu Glu Ser
      85              90              95
Asp Pro Tyr Phe Gly Phe Glu Glu Ala Lys Arg Lys Leu Gln Glu Arg
      100              105              110
Pro Trp Leu Val Asp Ser Tyr Ser Glu Trp Leu Gln Arg Leu Lys Gly
      115              120              125
Pro Pro His Lys Cys Ala Leu Ile Phe Ala Asp Asn Ser Gly Ile Asp
      130              135              140
Ile Ile Leu Gly Val Phe Pro Phe Val Arg Glu Leu Leu Leu Arg Gly
      145              150              155              160
Thr Glu Val Ile Leu Ala Cys Asn Ser Gly Pro Ala Leu Asn Asp Val
      165              170              175
Thr His Ser Glu Ser Leu Ile Val Ala Glu Arg Ile Ala Gly Met Asp
      180              185              190
Pro Val Val His Ser Ala Leu Gln Glu Glu Arg Leu Leu Leu Val Gln
      195              200              205
Thr Gly Ser Ser Ser Pro Cys Leu Asp Leu Ser Arg Leu Asp Lys Gly
      210              215              220
Leu Ala Ala Leu Val Arg Glu Arg Gly Ala Asp Leu Val Val Ile Glu
      225              230              235              240
Gly Met Gly Arg Ala Val His Thr Asn Tyr His Ala Ala Leu Arg Cys
      245              250              255
Glu Ser Leu Lys Leu Ala Val Ile Lys Asn Ala Trp Leu Ala Glu Arg
      260              265              270
Leu Gly Gly Arg Leu Phe Ser Val Ile Phe Lys Tyr Glu Val Pro Ala
      275              280              285
Glu

```

&lt;210&gt; 5635

&lt;211&gt; 614

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5635

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nntgtgaaag atgttgcaga agtgttccag aagtggctga agatagaagg aaaaaagtgc
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cactgcctat cagaaaaaac aaaacaaaac atgggaaata caaccaccaa attccgtaaa
120
gcactcatca atggtgatga aaacctggcc tgccaaatat atgaaaacaa tcttcagcta
180

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aaagaatctc ttgatccaaa tacatcttat ggggagccct accagcacia tactccatta  
 240  
 cattatgctg ctgacatgg aatgaataaa atattaggag atgatttcag aagagcagat  
 300  
 tgtctgcaga tgatcttaaa atggaaagga gcaaaacttg accaggggtga atatgagaga  
 360  
 gcagctattg atgctgttga taacaaaaaa aacacaccct tgcactatgc tgctgcctca  
 420  
 gggatgaaag cctgtgtaga aaaacatgga ggagacttgt ttgctgagaa tgaaaataaa  
 480  
 gatactcctt gtgattgtgc tgaaaagcaa caccacaaag atttggccct caatctggaa  
 540  
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 600  
 ttagacaaac gaga  
 614

<210> 5636

<211> 204

<212> PRT

<213> Homo sapiens

<400> 5636

Xaa	Val	Lys	Asp	Val	Ala	Glu	Val	Phe	Gln	Lys	Trp	Leu	Lys	Ile	Glu
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Gly	Lys	Lys	Cys	His	Cys	Leu	Ser	Glu	Lys	Thr	Lys	Gln	Asn	Met	Gly
			20					25					30		
Asn	Thr	Thr	Thr	Lys	Phe	Arg	Lys	Ala	Leu	Ile	Asn	Gly	Asp	Glu	Asn
			35				40					45			
Leu	Ala	Cys	Gln	Ile	Tyr	Glu	Asn	Asn	Pro	Gln	Leu	Lys	Glu	Ser	Leu
	50					55				60					
Asp	Pro	Asn	Thr	Ser	Tyr	Gly	Glu	Pro	Tyr	Gln	His	Asn	Thr	Pro	Leu
65					70					75				80	
His	Tyr	Ala	Ala	Arg	His	Gly	Met	Asn	Lys	Ile	Leu	Gly	Asp	Asp	Phe
				85					90				95		
Arg	Arg	Ala	Asp	Cys	Leu	Gln	Met	Ile	Leu	Lys	Trp	Lys	Gly	Ala	Lys
			100				105						110		
Leu	Asp	Gln	Gly	Glu	Tyr	Glu	Arg	Ala	Ala	Ile	Asp	Ala	Val	Asp	Asn
	115						120					125			
Lys	Lys	Asn	Thr	Pro	Leu	His	Tyr	Ala	Ala	Ala	Ser	Gly	Met	Lys	Ala
	130					135					140				
Cys	Val	Glu	Lys	His	Gly	Gly	Asp	Leu	Phe	Ala	Glu	Asn	Glu	Asn	Lys
145					150					155				160	
Asp	Thr	Pro	Cys	Asp	Cys	Ala	Glu	Lys	Gln	His	His	Lys	Asp	Leu	Ala
			165				170						175		
Leu	Asn	Leu	Glu	Ser	Gln	Met	Val	Phe	Ser	Arg	Asp	Pro	Glu	Ala	Glu
		180					185						190		
Glu	Ile	Glu	Ala	Glu	Tyr	Ala	Ala	Leu	Asp	Lys	Arg				
	195						200								

<210> 5637

<211> 825

<212> DNA

<213> Homo sapiens

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 120  
 ccaggtactc agggccctgc cctcgtggcc ttgtccgctc gccgcgggtg gggctggcac  
 180  
 aaggcccgtt ttggaggaag tggaggctcc caggagaaag gcagtggctg tgatcgaca  
 240  
 gcccaggctc tgccctgcac tgccctggac cagcaggctg cccaccccag acaggtggga  
 300  
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 360  
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 420  
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 480  
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 540  
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 720  
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 825

<210> 5638  
 <211> 132  
 <212> PRT  
 <213> Homo sapiens

<400> 5638  
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 Leu Thr Gly Ala Arg Trp Phe Cys Asp Pro Ser Gln Ala His Ala Pro  
 35 40 45  
 Leu Ala Gly Arg Leu Ala Arg Ala Pro Leu Trp Leu Ala Cys Gly Asp  
 50 55 60  
 Thr Trp Ala Leu Leu His Val Pro Thr Arg Ala Val Ala Gly Ser Lys  
 65 70 75 80  
 Glu Ala Gln Pro Arg Pro Ala Cys Val Asp Pro Ala Gly Leu Arg Ala  
 85 90 95  
 Pro Glu Leu Leu Thr Val Ser Glu Pro Gly Cys Pro Ala Pro Arg Arg  
 100 105 110  
 Pro Pro Ser Ser Cys Pro Ala Trp Asp Pro Ser Ala Val Cys Leu Leu  
 115 120 125  
 Asn Gln Gly Val

130

&lt;210&gt; 5639

&lt;211&gt; 2433

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5639

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60  
ccaacaatta ttgcagcaca taatcaatat aacattata tatatgaact atttgacact  
120  
atttgacatt tcttcttcca catccagtgt atctgacatt tagcgcacat ttgatttgca  
180  
ctcaccact ttgaggagct caattgccgc ttaagtccgt ggctagtggc tgcctaaag  
240  
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300  
gcatgaccg gcctgaagta gcggcggaac ggaagtcgct tgtgtatgaa cgcagcggcg  
360  
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420  
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480  
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600  
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720  
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780  
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840  
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900  
gctgagcaga ccatctggaa ccgtttacat cagcttaaag ccttgaagac aaggcggccc  
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1020  
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1080  
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1140  
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1380



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 2280  
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 2340  
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 2400  
 ttacctaata ctaaggttta aaaaaaaaaa aaa  
 2433

&lt;210&gt; 5640

&lt;211&gt; 540

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5640

Met Cys Pro Ser Pro Glu Arg Gln Glu Asp Gly Ala Arg Lys Asp Phe  
 1 5 10 15  
 Ser Ser Arg Leu Ala Ala Gly Pro Thr Phe Gln His Phe Leu Lys Ser  
 20 25 30  
 Ala Ser Ala Pro Gln Glu Lys Leu Ser Ser Glu Val Glu Asp Pro Pro  
 35 40 45  
 Pro Tyr Leu Met Met Asp Glu Leu Leu Gly Arg Gln Arg Lys Val Tyr  
 50 55 60  
 Leu Glu Thr Tyr Gly Cys Gln Met Asn Val Asn Asp Thr Glu Ile Ala  
 65 70 75 80  
 Trp Ser Ile Leu Gln Lys Ser Gly Tyr Leu Arg Pro Val Thr Ser Lys

85 90 95  
 Ala Asp Val Ile Leu Leu Val Thr Cys Ser Ile Arg Glu Lys Ala Glu  
 100 105 110  
 Gln Thr Ile Trp Asn Arg Leu His Gln Leu Lys Ala Leu Lys Thr Arg  
 115 120 125  
 Arg Pro Arg Ser Arg Val Pro Leu Arg Ile Gly Ile Leu Gly Cys Met  
 130 135 140  
 Ala Glu Arg Leu Lys Glu Glu Ile Leu Asn Arg Glu Lys Met Val Asp  
 145 150 155 160  
 Ile Leu Ala Gly Pro Asp Ala Tyr Arg Asp Leu Pro Arg Leu Leu Ala  
 165 170 175  
 Val Ala Glu Ser Gly Gln Gln Ala Ala Asn Val Leu Leu Ser Leu Asp  
 180 185 190  
 Glu Thr Tyr Ala Asp Val Met Pro Val Gln Thr Ser Ala Ser Ala Thr  
 195 200 205  
 Ser Ala Phe Val Ser Ile Met Arg Gly Cys Asp Asn Met Cys Ser Tyr  
 210 215 220  
 Cys Ile Val Pro Phe Thr Arg Gly Arg Glu Arg Ser Arg Pro Ile Ala  
 225 230 235 240  
 Ser Ile Leu Glu Glu Val Lys Lys Leu Ser Glu Gln Gly Leu Lys Glu  
 245 250 255  
 Val Thr Leu Leu Gly Gln Asn Val Asn Ser Phe Arg Asp Asn Ser Glu  
 260 265 270  
 Val Gln Phe Asn Ser Ala Val Pro Thr Asn Leu Ser Arg Gly Phe Thr  
 275 280 285  
 Thr Asn Tyr Lys Thr Lys Gln Gly Gly Leu Arg Phe Ala His Leu Leu  
 290 295 300  
 Asp Gln Val Ser Arg Val Asp Pro Glu Met Arg Ile Arg Phe Thr Ser  
 305 310 315 320  
 Pro His Pro Lys Asp Phe Pro Asp Glu Val Leu Gln Leu Ile His Glu  
 325 330 335  
 Arg Asp Asn Ile Cys Lys Gln Ile His Leu Pro Ala Gln Ser Gly Ser  
 340 345 350  
 Ser Arg Val Leu Glu Ala Met Arg Arg Gly Tyr Ser Arg Glu Ala Tyr  
 355 360 365  
 Val Glu Leu Val His His Ile Arg Glu Ser Ile Pro Gly Val Ser Leu  
 370 375 380  
 Ser Ser Asp Phe Ile Ala Gly Phe Cys Gly Glu Thr Glu Glu Asp His  
 385 390 395 400  
 Val Gln Thr Val Ser Leu Leu Arg Glu Val Gln Tyr Asn Met Gly Phe  
 405 410 415  
 Leu Phe Ala Tyr Ser Met Arg Gln Lys Thr Arg Ala Tyr His Arg Leu  
 420 425 430  
 Lys Asp Asp Val Pro Glu Glu Val Lys Leu Arg Arg Leu Glu Glu Leu  
 435 440 445  
 Ile Thr Ile Phe Arg Glu Glu Ala Thr Lys Ala Asn Gln Thr Ser Val  
 450 455 460  
 Gly Cys Thr Gln Leu Val Leu Val Glu Gly Leu Ser Lys Arg Ser Ala  
 465 470 475 480  
 Thr Asp Leu Cys Gly Arg Asn Asp Gly Asn Leu Lys Val Ile Phe Pro  
 485 490 495  
 Asp Ala Glu Met Glu Asp Val Asn Asn Pro Gly Leu Arg Val Arg Ala  
 500 505 510  
 Gln Pro Gly Asp Tyr Val Leu Val Lys Ile Thr Xaa Gln Pro Val Leu

515                      520                      525  
 Arg His Leu Gly Asp Met Phe Ser Ala Gly Pro Leu  
 530                      535                      540

<210> 5641  
 <211> 293  
 <212> DNA  
 <213> Homo sapiens

<400> 5641  
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 60  
 ttctgtggcc acgcgtccaa aaccaatcag gtcaactcgg gcgggtgtgct gctgaggttg  
 120  
 caggtgggag aggaggtgtg gctggctggg gcacccctgg catccctgga gagccaggtg  
 180  
 aggagggcag atacaagcag aaattccagt cagtgttcac ggtcactcgg cagacccacc  
 240  
 agccccctgc acccaacagc ctgatcagat tcaacgcggg cctcaccaac ccg  
 293

<210> 5642  
 <211> 87  
 <212> PRT  
 <213> Homo sapiens

<400> 5642  
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 Lys Val Val Thr Phe Cys Gly His Ala Ser Lys Thr Asn Gln Val Asn  
 20                      25                      30  
 Ser Gly Gly Val Leu Leu Arg Leu Gln Val Gly Glu Glu Val Trp Leu  
 35                      40                      45  
 Ala Gly Ala Pro Leu Ala Ser Leu Glu Ser Gln Val Arg Arg Ala Asp  
 50                      55                      60  
 Thr Ser Arg Asn Ser Ser Gln Cys Ser Arg Ser Leu Gly Arg Pro Thr  
 65                      70                      75                      80  
 Ser Pro Leu His Pro Thr Ala  
 85

<210> 5643  
 <211> 1218  
 <212> DNA  
 <213> Homo sapiens

<400> 5643  
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 120  
 aaagccaaac gatatcacat ggatgccagt ggtgaggctg taagcgaaac tcttcagttt  
 180  
 aaagctcaag atctcttaag ggcagtccca agatccagag cagagatgta tgatgacgtc  
 240

cacagcgatg gcagatactc cctcagtgga tctgtagctc actctagaga tgccggaaga  
 300  
 gaaggcctga gaagtgacgt atttccaggg ccttccttca gatcaagcaa cccttccatc  
 360  
 agtgatgaca gctactttcg caaagaatgt ggccgggatac tggaattttc tcaactctgat  
 420  
 tctcggggacc aggtcattgg ccaccggaaa ttggggcatt tccgtttctca ggactggaaa  
 480  
 tttgcgctcc gtggttcttg ggaacaagac tttggccatc cagttttctca agagtctctt  
 540  
 tggtcacagg agtatagttt tgggtccctct gcagtttttg gggacttttg atcttccagg  
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 ctgattgaga aagagtgttt ggagaaggag agtcgggatt atgacgtgga ccatcctggg  
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 840  
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 900  
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 960  
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 cacagagatt tttgcttt  
 1218

&lt;210&gt; 5644

&lt;211&gt; 202

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5644

Trp	Glu	Gln	Asp	Phe	Gly	His	Pro	Val	Ser	Gln	Glu	Ser	Ser	Trp	Ser
1				5				10						15	
Gln	Glu	Tyr	Ser	Phe	Gly	Pro	Ser	Ala	Val	Leu	Gly	Asp	Phe	Gly	Ser
		20					25					30			
Ser	Arg	Leu	Ile	Glu	Lys	Glu	Cys	Leu	Glu	Lys	Glu	Ser	Arg	Asp	Tyr
		35				40					45				
Asp	Val	Asp	His	Pro	Gly	Glu	Ala	Asp	Ser	Val	Leu	Arg	Gly	Ser	Ser
	50					55					60				
Gln	Val	Gln	Ala	Arg	Gly	Arg	Ala	Leu	Asn	Ile	Val	Asp	Gln	Glu	Gly
65					70					75				80	
Ser	Leu	Leu	Gly	Lys	Gly	Glu	Thr	Gln	Gly	Leu	Leu	Thr	Ala	Lys	Gly
				85					90					95	
Gly	Val	Gly	Lys	Leu	Val	Thr	Leu	Arg	Asn	Val	Ser	Thr	Lys	Lys	Ile

```

      100      105      110
Pro Thr Val Asn Arg Ile Thr Pro Lys Thr Gln Gly Thr Asn Gln Ile
      115      120      125
Gln Lys Asn Thr Pro Ser Pro Asp Val Thr Leu Gly Thr Asn Pro Gly
      130      135      140
Thr Glu Asp Ile Gln Phe Pro Ile Gln Lys Ile Pro Leu Gly Leu Asp
      145      150      155      160
Leu Lys Asn Leu Arg Leu Pro Arg Arg Lys Met Ser Phe Asp Ile Ile
      165      170      175
Asp Lys Ser Asp Val Phe Ser Arg Phe Gly Ile Glu Ile Ile Lys Trp
      180      185      190
Ala Gly Phe His Thr Ile Lys Leu Asp Tyr
      195      200

```

&lt;210&gt; 5645

&lt;211&gt; 156

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5645

```

ccacgtccat cccgaagaag gaactgcagg tgggcgggttt ttggcctggc acagagatgt
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cctcagatca gttccccctc tcccaggcaa gaggacacga gcactggcaa gttcacctgc
120
aaagtccccg gcctctacta ctttgtctac cacgcg
156

```

&lt;210&gt; 5646

&lt;211&gt; 52

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5646

```

Pro Arg Pro Ser Arg Arg Arg Asn Cys Arg Trp Ala Val Phe Gly Leu
1      5      10      15
Ala Gln Arg Cys Pro Gln Ile Ser Phe Pro Ser Pro Arg Gln Glu Asp
20     25     30
Thr Ser Thr Gly Lys Phe Thr Cys Lys Val Pro Gly Leu Tyr Tyr Phe
35     40     45
Val Tyr His Ala
50

```

&lt;210&gt; 5647

&lt;211&gt; 150

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5647

```

cccatggggc cgggcaccct ggcattccca ggggggtccca tggggccatt tttcccagga
60
aggcccaagg gggagccagg aatcccagcc attcccggga tccgaggacc caaagggcag
120
aagggagaac ccggcttacc cggccatccn
150

```

&lt;210&gt; 5648

&lt;211&gt; 50

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5648

```

Pro Met Gly Pro Gly Thr Leu Ala Phe Pro Gly Gly Pro Met Gly Pro
 1             5             10             15
Phe Phe Pro Gly Arg Pro Lys Gly Glu Pro Gly Ile Pro Ala Ile Pro
      20             25             30
Gly Ile Arg Gly Pro Lys Gly Gln Lys Gly Glu Pro Gly Leu Pro Gly
      35             40             45
His Pro
      50

```

&lt;210&gt; 5649

&lt;211&gt; 345

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5649

```

ngggacctgc aagcccgcgg ccagacctgc cagcgcgccg gccatggctg tcgccgcccgc
60
aaccgcctgg tccctcgat cgcgcccagc ccagactcgg actcggacac agactcggag
120
gacccgagtc tccggcgag cgcggggcgc ttgctccgct cgcaggtcat ccacagcggg
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cacttcattg tgctgctgcc gcacagcgac tcgctgcccc ggcgggcgca ccaggagggg
240
ccgtggggcc ctccgacttc gggccgcgca gtatcgacc cactcaca cgcctcttcg
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agtgcctgag cctggcctac agtggcaagc tggggctctc caagt
345

```

&lt;210&gt; 5650

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5650

```

Met Ala Val Ala Ala Ala Thr Ala Trp Ser Leu Gly Ser Arg Pro Ala
 1             5             10             15
Gln Thr Arg Thr Arg Thr Gln Thr Arg Arg Thr Arg Val Ser Gly Ala
      20             25             30
Ala Arg Ala Ala Cys Ser Ala Arg Arg Ser Ser Thr Ala Val Thr Ser
      35             40             45
Trp Cys Arg Arg Arg Thr Ala Thr Arg Cys Pro Gly Gly Ala Thr Arg
      50             55             60
Arg Val Arg Gly Ala Leu Arg Leu Arg Ala Ala Gln Tyr Arg Pro His
      65             70             75             80
Thr His Thr Pro Leu Arg Val Leu Glu Pro Gly Leu Gln Trp Gln Ala
      85             90             95
Gly Val Ser Gln

```

100

&lt;210&gt; 5651

&lt;211&gt; 615

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5651

ctcgaggaat attgggtcct ctgcgcggcc gtagagctcc gccaaagtgc cctgcgcgga  
60  
ggagaagtgg cgtcgagtcc ggccgggag tagaggaaat tgcggtagtg accctcgggc  
120  
ctcgccatga agagccgctt tagcaccatt gacctccgcg ccgtactcgc ggagctgaat  
180  
gctagcttgc taggaatgag agtaaacaat gtttatgatg tggataataa gacatacctt  
240  
attcgtcttc aaaaaccgga ctttaaagct acacttttac ttgaatctgg catacaaatt  
300  
catacaacag aatttgagtgc gcctaagaat atgatgccgt ctagttttgc catgaagtgc  
360  
cgaaaacatt tgaagagtcg gagattagtc agtgcaaac agcttggtgt ggatagaatt  
420  
gtagattttc aatttggaag tgatgaagct gttaccatt taatcattga gctctatgat  
480  
agggggaaca ttgttcttac agattatgag tacgtaattt taaatattct aagggttcga  
540  
actgatgagg cagatgatgt taaatttgcg gttcgtgaac gctatccact tgatcatgct  
600  
agagctgctg aacct  
615

&lt;210&gt; 5652

&lt;211&gt; 163

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5652

Met Lys Ser Arg Phe Ser Thr Ile Asp Leu Arg Ala Val Leu Ala Glu  
1 5 10 15  
Leu Asn Ala Ser Leu Leu Gly Met Arg Val Asn Asn Val Tyr Asp Val  
20 25 30  
Asp Asn Lys Thr Tyr Leu Ile Arg Leu Gln Lys Pro Asp Phe Lys Ala  
35 40 45  
Thr Leu Leu Leu Glu Ser Gly Ile Gln Ile His Thr Thr Glu Phe Glu  
50 55 60  
Trp Pro Lys Asn Met Met Pro Ser Ser Phe Ala Met Lys Cys Arg Lys  
65 70 75 80  
His Leu Lys Ser Arg Arg Leu Val Ser Ala Lys Gln Leu Gly Val Asp  
85 90 95  
Arg Ile Val Asp Phe Gln Phe Gly Ser Asp Glu Ala Ala Tyr His Leu  
100 105 110  
Ile Ile Glu Leu Tyr Asp Arg Gly Asn Ile Val Leu Thr Asp Tyr Glu  
115 120 125  
Tyr Val Ile Leu Asn Ile Leu Arg Phe Arg Thr Asp Glu Ala Asp Asp

130	135	140
Val Lys Phe Ala Val Arg Glu Arg Tyr Pro Leu Asp His Ala Arg Ala		
145	150	155
Ala Glu Pro		160

&lt;210&gt; 5653

&lt;211&gt; 1439

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5653

```

nnacgcgtcg catacagcca acctgtgcgt gctgctgtac cgcagcggcg tcaaagtggg
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caccttctgt ggccacacgt ccaaaaccaa tcaggtcaac tcgggcgggtg tgctgctgag
120
gttgacgggtg aacttgccag tgctcgtgtc ataatctccc tcgggggttg tgaggaccgc
180
gttgaatctg atcaggetgt tgggtgcagg gggctgggtg gtctgccgag tgaccactca
240
gacacggtgt cctcttgccct gggagagggg aagcagatct gaggacatct ctgtgccagg
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360
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accagatgga cttctcctcc agggagccca cctgaccca ccccactgc acccctccc
1260

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catgggttct ctccttcctc tgaacttctt taggagtcac tgcttggtg gttcctggga  
 1320  
 cacttaacca atgccttctg gtactgccat tctttttttt ttttttcaag tattggaagg  
 1380  
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 1439

<210> 5654

<211> 245

<212> PRT

<213> Homo sapiens

<400> 5654

Met	Asp	Val	Gly	Pro	Ser	Ser	Leu	Pro	His	Leu	Gly	Leu	Lys	Leu	Leu
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Leu	Leu	Leu	Leu	Leu	Leu	Pro	Leu	Arg	Gly	Gln	Ala	Asn	Thr	Gly	Cys
			20					25					30		
Tyr	Gly	Ile	Pro	Gly	Met	Pro	Gly	Leu	Pro	Gly	Ala	Pro	Gly	Lys	Asp
		35					40					45			
Gly	Tyr	Asp	Gly	Leu	Pro	Gly	Pro	Lys	Gly	Glu	Pro	Gly	Ile	Pro	Ala
	50					55				60					
Ile	Pro	Gly	Ile	Arg	Gly	Pro	Lys	Gly	Gln	Lys	Gly	Glu	Pro	Gly	Leu
65				70					75					80	
Pro	Gly	His	Pro	Gly	Lys	Asn	Gly	Pro	Met	Gly	Pro	Pro	Gly	Met	Pro
			85					90					95		
Gly	Val	Pro	Gly	Pro	Met	Gly	Ile	Pro	Gly	Glu	Pro	Gly	Glu	Glu	Gly
			100					105					110		
Arg	Tyr	Lys	Gln	Lys	Phe	Gln	Ser	Val	Phe	Thr	Val	Thr	Arg	Gln	Thr
		115					120					125			
His	Gln	Pro	Pro	Ala	Pro	Asn	Ser	Leu	Ile	Arg	Phe	Asn	Ala	Val	Leu
	130					135					140				
Thr	Asn	Pro	Gln	Gly	Asp	Tyr	Asp	Thr	Ser	Thr	Gly	Lys	Phe	Thr	Cys
145				150						155				160	
Lys	Val	Pro	Gly	Leu	Tyr	Tyr	Phe	Val	Tyr	His	Ala	Ser	His	Thr	Ala
			165					170					175		
Asn	Leu	Cys	Val	Leu	Leu	Tyr	Arg	Ser	Gly	Val	Lys	Val	Val	Thr	Phe
		180					185					190			
Cys	Gly	His	Thr	Ser	Lys	Thr	Asn	Gln	Val	Asn	Ser	Gly	Gly	Val	Leu
	195						200				205				
Leu	Arg	Leu	Gln	Val	Gly	Glu	Glu	Val	Trp	Leu	Ala	Val	Asn	Asp	Tyr
	210					215					220				
Tyr	Asp	Met	Val	Gly	Ile	Gln	Gly	Ser	Asp	Ser	Val	Phe	Ser	Gly	Phe
225					230					235				240	
Leu	Leu	Phe	Pro	Asp											
				245											

<210> 5655

<211> 3810

<212> DNA

<213> Homo sapiens

<400> 5655

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<210> 5656

<211> 987

<212> PRT

<213> Homo sapiens

<400> 5656

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Ala	Ser	Phe	Thr	Asn	Ser	Glu	Leu	His	Arg	Ala	Met	Asn	Leu	His	Val
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Gly	Asn	Leu	Arg	Leu	Leu	Ser	Gly	Pro	Leu	Asp	Gln	Val	Arg	Ala	Ala
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Leu	Pro	Thr	Pro	Ala	Leu	Ser	Pro	Glu	Asp	Lys	Ala	Val	Leu	Gln	Asn
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Leu	Lys	Arg	Ile	Leu	Ala	Lys	Val	Gln	Glu	Met	Arg	Asp	Gln	Arg	Val
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Ser	Leu	Glu	Gln	Gln	Leu	Arg	Glu	Leu	Ile	Gln	Lys	Asp	Asp	Ile	Thr
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Glu	Gln	Leu	Lys	Lys	Tyr	Asp	Gln	Leu	Lys	Val	Tyr	Leu	Glu	Gln	Asn
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Leu	Ala	Ala	Gln	Asp	Arg	Val	Leu	Cys	Ala	Leu	Thr	Glu	Ala	Asn	Val
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Gln	Tyr	Ala	Ala	Val	Arg	Arg	Val	Leu	Ser	Asp	Leu	Asp	Gln	Lys	Trp
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Asn	Ser	Thr	Leu	Gln	Thr	Leu	Val	Ala	Ser	Tyr	Glu	Ala	Tyr	Glu	Asp
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Ser	Lys	Val	Ala	Ala	Leu	Leu	Glu	Arg	Thr	Gln	Ser	Thr	Cys	Gln	Ala

225 230 235 240  
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 Pro Pro Pro Arg Pro Thr Ala Pro Lys Pro Leu Leu Pro Arg Arg Glu  
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 Thr Gly Pro Gly Pro His Tyr Leu Ser Gly Pro Leu Pro Pro Gly Thr  
 325 330 335  
 Tyr Ser Gly Pro Thr Gln Leu Ile Gln Pro Arg Ala Pro Gly Pro His  
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 Thr Pro Glu Leu Gly Leu Val Pro Arg Ser Ser Pro Gln His Gly Val  
 370 375 380  
 Val Ser Ser Pro Tyr Val Gly Val Gly Pro Ala Pro Pro Val Ala Gly  
 385 390 395 400  
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 405 410 415  
 Ala Val Arg Pro Ala Thr Thr Thr Val Asp Ser Ile Gln Ala Pro Ile  
 420 425 430  
 Pro Ser His Thr Ala Pro Arg Pro Asn Pro Thr Pro Ala Pro Pro Pro  
 435 440 445  
 Pro Cys Phe Pro Val Pro Pro Pro Gln Pro Leu Pro Thr Pro Tyr Thr  
 450 455 460  
 Tyr Pro Ala Gly Ala Lys Gln Pro Ile Pro Ala Gln His His Phe Ser  
 465 470 475 480  
 Ser Gly Ile Pro Thr Gly Phe Pro Ala Pro Arg Ile Gly Pro Gln Pro  
 485 490 495  
 Gln Pro His Pro Gln Pro His Pro Ser Gln Ala Phe Gly Pro Gln Pro  
 500 505 510  
 Pro Gln Gln Pro Leu Pro Leu Gln His Pro His Leu Phe Pro Pro Gln  
 515 520 525  
 Ala Pro Gly Leu Leu Pro Pro Gln Ser Pro Tyr Pro Tyr Ala Pro Gln  
 530 535 540  
 Pro Gly Val Leu Gly Gln Pro Pro Pro Pro Leu His Thr Gln Leu Tyr  
 545 550 555 560  
 Pro Gly Pro Ala Gln Asp Pro Leu Pro Ala His Ser Gly Ala Leu Pro  
 565 570 575  
 Phe Pro Ser Pro Gly Pro Pro Gln Pro Pro His Pro Pro Leu Ala Tyr  
 580 585 590  
 Gly Pro Ala Pro Ser Thr Arg Pro Met Gly Pro Gln Ala Ala Pro Leu  
 595 600 605  
 Thr Ile Arg Gly Pro Ser Ser Ala Gly Gln Ser Thr Pro Ser Pro His  
 610 615 620  
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 625 630 635 640  
 Arg Pro Pro Ala Ala Glu Pro Pro Pro Cys Leu Arg Arg Gly Ala Ala  
 645 650 655  
 Ala Ala Asp Leu Leu Ser Ser Ser Pro Glu Ser Gln His Gly Gly Thr

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Gln	Ser	Pro	Gly	Gly	Gly	Gln	Pro	Leu	Leu	Gln	Pro	Thr	Lys	Val	Asp	
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Pro	Tyr	Glu	His	Pro	Glu	Arg	Leu	Arg	Gln	Leu	Gln	Gln	Glu	Leu	Glu	
705					710					715					720	
Ala	Phe	Arg	Gly	Gln	Leu	Gly	Asp	Val	Gly	Ala	Leu	Asp	Thr	Val	Trp	
725					730					735						
Arg	Glu	Leu	Gln	Asp	Ala	Gln	Glu	His	Asp	Ala	Arg	Gly	Arg	Ser	Ile	
740					745					750						
Ala	Ile	Ala	Arg	Cys	Tyr	Ser	Leu	Lys	Asn	Arg	His	Gln	Asp	Val	Met	
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Ile	Asn	Ala	Ser	Cys	Val	Glu	Gly	Leu	Ser	Pro	Tyr	Cys	Pro	Pro	Leu	
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Val	Ala	Thr	Gln	Ala	Pro	Leu	Pro	Gly	Thr	Ala	Ala	Asp	Phe	Trp	Leu	
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Arg	Ser	Thr	Glu	Thr	His	Val	Glu	Arg	Val	Leu	Ser	Leu	Gln	Phe	Arg	
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Asp	Gln	Ser	Leu	Lys	Arg	Ser	Leu	Val	His	Leu	His	Phe	Pro	Thr	Trp	
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Pro	Glu	Leu	Gly	Leu	Pro	Asp	Ser	Pro	Ser	Asn	Leu	Leu	Arg	Phe	Ile	
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Gln	Glu	Val	His	Ala	His	Tyr	Leu	His	Gln	Arg	Pro	Leu	His	Thr	Pro	
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Ile	Ile	Val	His	Cys	Ser	Ser	Gly	Val	Gly	Arg	Thr	Gly	Ala	Phe	Ala	
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Leu	Leu	Tyr	Ala	Ala	Val	Gln	Glu	Val	Glu	Ala	Gly	Asn	Gly	Ile	Pro	
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Glu	Leu	Pro	Gln	Leu	Val	Arg	Arg	Met	Arg	Gln	Gln	Arg	Lys	His	Met	
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&lt;210&gt; 5657

&lt;211&gt; 1020

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5657

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&lt;210&gt; 5658

&lt;211&gt; 301

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5658

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 His Glu Lys Lys Lys Asp Thr Ala Ser Gly Tyr Gly Thr Gln Asn  
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 35 40 45  
 Ser Leu Gln Pro Cys His Asp Pro Val Val Thr Pro Asp Gly Tyr Leu  
 50 55 60  
 Tyr Glu Arg Glu Ala Ile Leu Glu Tyr Ile Leu His Gln Lys Lys Glu  
 65 70 75 80  
 Ile Ala Arg Gln Met Lys Ala Tyr Glu Lys Gln Arg Gly Thr Arg Arg  
 85 90 95  
 Glu Glu Gln Lys Glu Leu Gln Arg Ala Ala Ser Gln Asp His Val Arg  
 100 105 110  
 Gly Phe Leu Glu Lys Glu Ser Ala Ile Val Ser Arg Pro Leu Asn Pro  
 115 120 125  
 Phe Thr Ala Lys Ala Leu Ser Gly Thr Ser Pro Asp Asp Val Gln Pro  
 130 135 140  
 Gly Pro Ser Val Gly Pro Pro Ser Lys Asp Lys Asp Lys Val Leu Pro

145		150		155		160
Ser	Phe	Trp	Ile	Pro	Ser	Leu
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Glu	Lys	Pro	Ser	Arg	Thr	Val
Arg	Met	Ser	Asp	Leu	Thr	Pro
Val	Asp	Arg	Val	Gly	Leu	Ile
Val	Thr	Arg	Asp	Ser	Leu	Ser
Pro	Ser	Gly	Ala	Val	Thr	Leu
Lys	Asp	Met	Val	Asp	Pro	Val
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Lys	Leu	Gln	Ala	Glu	Lys	Ser

&lt;210&gt; 5659

&lt;211&gt; 1263

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5659

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840

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<210> 5660

<211> 253

<212> PRT

<213> Homo sapiens

<400> 5660

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			20					25					30		
Lys	Asp	Leu	Ser	Ile	Ser	Arg	Leu	Leu	Ser	Gln	Thr	Phe	Arg	Gly	Lys
		35					40					45			
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	50				55					60					
Ser	Glu	Gln	Asp	Leu	Trp	Asp	Trp	Leu	Arg	Asn	Ser	Thr	Asp	Leu	Gln
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Glu	Pro	Arg	Pro	Arg	Ala	Lys	Arg	Arg	Pro	Ile	Val	Lys	Thr	Gly	Lys
			85					90						95	
Phe	Lys	Lys	Met	Phe	Gly	Trp	Gly	Asp	Phe	His	Ser	Asn	Ile	Lys	Thr
			100				105						110		
Val	Lys	Leu	Asn	Leu	Leu	Ile	Thr	Gly	Lys	Ile	Val	Asp	His	Gly	Asn
		115				120						125			
Gly	Thr	Phe	Ser	Val	Tyr	Phe	Arg	His	Asn	Ser	Thr	Gly	Gln	Gly	Asn
	130					135					140				
Val	Ser	Val	Ser	Leu	Val	Pro	Pro	Thr	Lys	Ile	Val	Glu	Phe	Asp	Leu
145				150						155				160	
Ala	Gln	Gln	Thr	Val	Ile	Asp	Ala	Lys	Asp	Ser	Lys	Ser	Phe	Asn	Cys
			165					170					175		
Arg	Ile	Glu	Tyr	Glu	Lys	Val	Asp	Lys	Ala	Thr	Lys	Asn	Thr	Leu	Cys
		180					185					190			
Asn	Tyr	Asp	Pro	Ser	Lys	Thr	Cys	Tyr	Gln	Glu	Gln	Thr	Gln	Ser	His
	195					200						205			
Val	Ser	Trp	Leu	Cys	Ser	Lys	Pro	Phe	Lys	Val	Ile	Cys	Ile	Tyr	Ile
	210				215					220					
Ser	Phe	Tyr	Ser	Thr	Asp	Tyr	Lys	Leu	Val	Gln	Lys	Val	Cys	Pro	Asp
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 <211> 578  
 <212> DNA  
 <213> Homo sapiens

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 420  
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<210> 5662  
 <211> 148  
 <212> PRT  
 <213> Homo sapiens

<400> 5662  
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 Gly Pro Ile Thr Gln Cys Thr Ala Arg Thr Gln Gln Glu Ala Pro Ala  
 35 40 45  
 Thr Gly Pro Asp Leu Pro His Pro Gly Pro Asp Gly His Leu Asp Thr  
 50 55 60  
 His Ser Gly Leu Ser Ser Asn Ser Ser Met Thr Thr Arg Glu Leu Gln  
 65 70 75 80  
 Gln Tyr Trp Gln Asn Gln Lys Cys Arg Trp Lys His Val Lys Leu Leu  
 85 90 95  
 Phe Glu Ile Ala Ser Ala Arg Ile Glu Glu Arg Lys Val Ser Lys Phe  
 100 105 110  
 Val Met Gly Lys Ser Arg Pro Gly Glu Met Thr Tyr Pro Gly Ser Arg  
 115 120 125  
 Gly Glu Thr Gly Thr Ala Pro Glu Pro Asp Pro Arg Cys Pro Arg Gln  
 130 135 140  
 Ser Asp Met Leu

145

&lt;210&gt; 5663

&lt;211&gt; 857

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5663

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540
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600
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720
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780
ggctgtccgc agactctcca accagccggt caccgccatc tttccctgc taagcagcac
840
gccagccgc tgccatg
857

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&lt;210&gt; 5664

&lt;211&gt; 203

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5664

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20      25      30
Gly Lys Glu Met Ala Glu Glu Tyr Asp Glu Lys Thr Ser Glu Leu Leu
35      40      45
Val Arg Lys Trp Arg Val Lys Ser Ala Leu Gly Ala Met Gly Gln Trp
50      55      60
Gln Leu Glu Val Gly Asp Pro Ala Pro Leu Gly Ala Gly Asn Leu Gly

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65          70          75          80
Pro Glu Leu Ile Lys Glu Ser Asn Ala Asn Pro Ile Phe Met Arg Lys
          85          90          95
Asp Thr Lys Met Ser Phe Gln Trp Arg Ile Arg Asn Leu Pro Tyr Pro
          100          105          110
Lys Asp Val Tyr Ser Val Ser Val Asp Gln Lys Glu Arg Cys Ile Ile
          115          120          125
Val Arg Thr Thr Asn Lys Lys Tyr Tyr Lys Lys Phe Ser Ile Pro Asp
          130          135          140
Leu Asp Arg His Gln Leu Pro Leu Asp Asp Ala Leu Leu Ser Phe Ala
145          150          155          160
His Ala Asn Cys Thr Leu Ile Ile Ser Tyr Gln Lys Pro Lys Glu Val
          165          170          175
Val Val Ala Glu Ser Glu Leu Gln Lys Glu Leu Lys Lys Val Lys Thr
          180          185          190
Ala His Ser Asn Asp Gly Asp Cys Lys Thr Gln
          195          200

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&lt;210&gt; 5665

&lt;211&gt; 531

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5665

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531

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&lt;210&gt; 5666

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5666

```

Ser Trp Pro Gly Pro Ser Pro Gln Val Glu Arg Val Ser His Pro Leu
1          5          10          15
Leu Gln Gln Gln Tyr Glu Leu Tyr Arg Glu Arg Leu Leu Gln Arg Cys
          20          25          30
Glu Arg Arg Pro Val Glu Gln Val Leu Tyr His Gly Thr Thr Ala Pro

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35 40 45  
 Ala Val Pro Asp Ile Cys Ala His Gly Phe Asn Arg Ser Phe Cys Gly  
 50 55 60  
 Arg Asn Ala Thr Val Tyr Gly Lys Gly Val Tyr Phe Ala Arg Arg  
 65 70 75

&lt;210&gt; 5667

&lt;211&gt; 858

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5667

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 120  
 tttgagaagt taagaatgat ttccaaggaa atccgccaag ttgttcgaat gacttctgct  
 180  
 aacatggacc cagctatgat gtttcgacag aggtcactga gtcaaggaag cacaaattca  
 240  
 aacatgctgg atgttcaggg aggtgctcac aaaaaaaggg cacgccgcag ctctctgctt  
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 aatgcccaaga agctatatga ggatgcccaa atggcaagga aggtgaagca gtatctttcc  
 360  
 agtctcgatg tagagacaga tgaggagaag ttccagatga tgtcattaca gntggagcct  
 420  
 gcatatggta cctgtgagta caagttttca tttatgtgac gctaaagagc acaacaaaat  
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 aaaaacttat ttctctagaa ttatacctaa gtccaagaa aattaacttt cactcacaaa  
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 660  
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 720  
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 780  
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 840  
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 858

&lt;210&gt; 5668

&lt;211&gt; 152

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5668

Xaa Ser Ala Arg Gly Ser Gln Ser Met Gln Pro Pro Ile Ile Pro Leu  
 1 5 10 15  
 Phe Pro Val Val Lys Lys Asp Met Thr Phe Leu His Glu Gly Asn Asp  
 20 25 30  
 Ser Lys Val Asp Gly Leu Val Asn Phe Glu Lys Leu Arg Met Ile Ser

```

<400> 5669
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120
gccatgatgc gcagctccat agagagggggc aaatgggtct tcttcagaa ctgccacctg
180
gcaccaagct ggatgccagc cctagaacgc ctcatcgagc acatcaaccc cgacaaggta
240
cacagggact tccgcctctg gctcaccagc ctgcccagca acaagttccc agtgtccatc
300
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480
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720
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840
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aatcatctt ctgcaggcag ccaggggccg gaggagatag tggaggacgt caccctaaac
960

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 1140  
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 1380  
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 1842

&lt;210&gt; 5670

&lt;211&gt; 591

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5670

Phe	Val	Leu	Ser	Pro	Gly	Thr	Asp	Pro	Ala	Ala	Asp	Leu	Tyr	Lys	Phe
1				5				10						15	
Ala	Glu	Glu	Met	Lys	Phe	Ser	Lys	Lys	Leu	Ser	Ala	Ile	Ser	Leu	Gly
		20						25					30		
Gln	Gly	Gln	Gly	Pro	Arg	Ala	Glu	Ala	Met	Met	Arg	Ser	Ser	Ile	Glu
		35					40					45			
Arg	Gly	Lys	Trp	Val	Phe	Phe	Gln	Asn	Cys	His	Leu	Ala	Pro	Ser	Trp
		50				55					60				
Met	Pro	Ala	Leu	Glu	Arg	Leu	Ile	Glu	His	Ile	Asn	Pro	Asp	Lys	Val
65					70					75				80	
His	Arg	Asp	Phe	Arg	Leu	Trp	Leu	Thr	Ser	Leu	Pro	Ser	Asn	Lys	Phe
			85						90					95	
Pro	Val	Ser	Ile	Leu	Gln	Asn	Gly	Ser	Lys	Met	Thr	Ile	Glu	Pro	Pro
			100					105					110		
Arg	Gly	Val	Arg	Ala	Asn	Leu	Leu	Lys	Ser	Tyr	Ser	Ser	Leu	Gly	Glu
		115				120						125			
Asp	Phe	Leu	Asn	Ser	Cys	His	Lys	Val	Met	Glu	Phe	Lys	Ser	Leu	Leu

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130      135      140
Leu Ser Leu Cys Leu Phe His Gly Asn Ala Leu Glu Arg Arg Lys Phe
145      150      155      160
Gly Pro Leu Gly Phe Asn Ile Pro Tyr Glu Phe Thr Asp Gly Asp Leu
165      170      175
Arg Ile Cys Ile Ser Gln Leu Lys Met Phe Leu Asp Glu Tyr Asp Asp
180      185      190
Ile Pro Tyr Lys Val Leu Lys Tyr Thr Ala Gly Glu Ile Asn Tyr Gly
195      200      205
Gly Arg Val Thr Asp Asp Trp Asp Arg Arg Cys Ile Met Asn Ile Leu
210      215      220
Glu Asp Phe Tyr Asn Pro Asp Val Leu Ser Pro Glu His Ser Tyr Ser
225      230      235      240
Ala Ser Gly Ile Tyr His Gln Ile Pro Pro Thr Tyr Asp Leu His Gly
245      250      255
Tyr Leu Ser Tyr Ile Lys Ser Leu Pro Leu Asn Asp Met Pro Glu Ile
260      265      270
Phe Gly Leu His Asp Asn Ala Asn Ile Thr Phe Ala Gln Asn Glu Thr
275      280      285
Phe Ala Leu Leu Gly Thr Ile Ile Gln Leu Gln Pro Lys Ser Ser Ser
290      295      300
Ala Gly Ser Gln Gly Arg Glu Glu Ile Val Glu Asp Val Thr Gln Asn
305      310      315      320
Ile Leu Leu Lys Val Pro Glu Pro Ile Asn Leu Gln Trp Val Met Ala
325      330      335
Lys Tyr Pro Val Leu Tyr Glu Glu Ser Met Asn Thr Val Leu Val Gln
340      345      350
Glu Val Ile Arg Tyr Asn Arg Leu Leu Gln Val Ile Thr Gln Thr Leu
355      360      365
Gln Asp Leu Leu Lys Ala Leu Lys Gly Leu Val Val Met Ser Ser Gln
370      375      380
Leu Glu Leu Met Ala Ala Ser Leu Tyr Asn Asn Thr Val Pro Glu Leu
385      390      395      400
Trp Ser Ala Lys Ala Tyr Pro Ser Leu Lys Pro Leu Ser Ser Trp Val
405      410      415
Met Asp Leu Leu Gln Arg Leu Asp Phe Leu Gln Ala Trp Ile Gln Asp
420      425      430
Gly Ile Pro Ala Val Phe Trp Ile Ser Gly Phe Phe Phe Pro Gln Ala
435      440      445
Phe Leu Thr Gly Thr Leu Gln Asn Phe Ala Arg Lys Phe Val Ile Ser
450      455      460
Ile Asp Thr Ile Ser Phe Asp Phe Lys Val Met Phe Glu Ala Pro Ser
465      470      475      480
Glu Leu Thr Gln Arg Pro Gln Val Gly Cys Tyr Ile His Gly Leu Phe
485      490      495
Leu Glu Gly Ala Arg Trp Asp Pro Glu Ala Phe Gln Leu Ala Glu Ser
500      505      510
Gln Pro Lys Glu Leu Tyr Thr Glu Met Ala Val Ile Trp Leu Leu Pro
515      520      525
Thr Pro Asn Arg Lys Ala Gln Asp Gln Asp Phe Tyr Leu Cys Pro Ile
530      535      540
Tyr Lys Thr Leu Thr Arg Ala Gly Thr Leu Ser Thr Thr Gly His Ser
545      550      555      560
Thr Asn Tyr Val Ile Ala Val Glu Ile Pro Thr His Gln Pro Gln Arg

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565 570 575  
 His Trp Ile Lys Arg Gly Val Ala Leu Ile Cys Ala Leu Asp Tyr  
 580 585 590  
 <210> 5671  
 <211> 818  
 <212> DNA  
 <213> Homo sapiens  
 <400> 5671  
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 120  
 gttgcctatc tttgtcctct ctcttcgggc ttcgagatga atgtgcagcc ctgttctagg  
 180  
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 240  
 gcctgttttc actgtgaagt ttgcaagatg atgctgtctg ttaataactt tgtgagtcac  
 300  
 cagaaaaagc cgtactgtca cgcccataac cctaagaaca acactttcac cagtgtctat  
 360  
 cacactccat taaatctaaa tgtgaggaca tttccagagg ccatcagtgg gatccatgac  
 420  
 caagaagatg gtgaacagtg taaatcagtt tttcattggg acatgaaatc caaggataag  
 480  
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 540  
 gaagggaatg cttggtgccc aggagctctg ccagaccccg aaattgtaag gatgggtgag  
 600  
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 660  
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 720  
 agccaagtgg agtataagag agggcatgat gaacgatct ccagggttctc cacgggtggc  
 780  
 gatactctg agctgctacg gagcaaggct tggggcac  
 818

<210> 5672  
 <211> 220  
 <212> PRT  
 <213> Homo sapiens

<400> 5672  
 Met Asn Val Gln Pro Cys Ser Arg Cys Gly Tyr Gly Val Tyr Pro Ala  
 1 5 10 15  
 Glu Lys Ile Ser Cys Ile Asp Gln Ile Trp His Lys Ala Cys Phe His  
 20 25 30  
 Cys Glu Val Cys Lys Met Met Leu Ser Val Asn Asn Phe Val Ser His  
 35 40 45  
 Gln Lys Lys Pro Tyr Cys His Ala His Asn Pro Lys Asn Asn Thr Phe  
 50 55 60  
 Thr Ser Val Tyr His Thr Pro Leu Asn Leu Asn Val Arg Thr Phe Pro  
 65 70 75 80

Glu Ala Ile Ser Gly Ile His Asp Gln Glu Asp Gly Glu Gln Cys Lys  
                     85                    90                    95  
 Ser Val Phe His Trp Asp Met Lys Ser Lys Asp Lys Glu Gly Ala Pro  
                     100                    105                    110  
 Asn Arg Gln Pro Leu Ala Asn Glu Arg Ala Tyr Trp Thr Gly Tyr Gly  
                     115                    120                    125  
 Glu Gly Asn Ala Trp Cys Pro Gly Ala Leu Pro Asp Pro Glu Ile Val  
                     130                    135                    140  
 Arg Met Val Glu Ala Arg Lys Ser Leu Gly Glu Glu Tyr Thr Glu Asp  
 145                    150                    155                    160  
 Tyr Glu Gln Pro Arg Gly Lys Gly Ser Phe Pro Ala Met Ile Thr Pro  
                     165                    170                    175  
 Ala Tyr Gln Arg Ala Lys Lys Ala Asn Gln Leu Ala Ser Gln Val Glu  
                     180                    185                    190  
 Tyr Lys Arg Gly His Asp Glu Arg Ile Ser Arg Phe Ser Thr Val Ala  
                     195                    200                    205  
 Asp Thr Pro Glu Leu Leu Arg Ser Lys Ala Trp Gly  
                     210                    215                    220

&lt;210&gt; 5673

&lt;211&gt; 1279

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5673

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 360  
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 420  
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<210> 5674

<211> 81

<212> PRT

<213> Homo sapiens

<400> 5674

Leu	His	Ser	Gln	Ile	Tyr	Ser	Thr	Ala	Lys	Lys	Ala	Ser	Leu	Ser	Met
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Lys	Gly	Ser	Arg	Asp	Lys	Thr	Arg	Ala	Ala	Ser	Ser	Arg	Pro	Val	Pro
			20					25					30		
Ser	Val	Leu	Gly	Val	Pro	Pro	Trp	Ser	Thr	Leu	Leu	Gln	His	Pro	Gln
		35					40					45			
Asn	Met	Trp	Pro	Gly	Pro	Ala	Gln	Gln	Gln	Gly	Gln	Pro	Ser	Gly	Arg
	50					55					60				
Gln	Ala	Trp	Cys	Thr	Pro	Gly	Glu	Ala	Pro	Gly	Ala	Glu	Ala	Ala	Pro
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Gln															

<210> 5675

<211> 1074

<212> DNA

<213> Homo sapiens

<400> 5675

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 120  
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 180  
 cggtgtaaca tggcaccgag gttggggcca cagcaatgtg tgggacggtg ggggtgggctg  
 240  
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 1074

&lt;210&gt; 5676

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5676

Glu	Val	Thr	Val	Leu	Cys	Thr	Gly	Leu	Ser	Leu	Ser	Ile	Gly	Met	Thr
1				5				10					15		
Ala	Thr	Ser	Gln	Gly	Cys	Arg	Ala	Gly	Gly	Arg	Cys	Gly	Trp	Ala	Cys
			20					25					30		
Ala	Cys	Phe	Arg	Arg	Gln	Gln	Asn	Arg	Thr	Gln	Pro	Ala	Val	Thr	Pro
		35					40					45			
His	Ser	Arg	Ser	Arg	Arg	Thr	Ala	Ser	Arg	Met	Ser	Leu	Gly	Glu	Gln
	50					55					60				
Gly	Ser	Thr	Thr	Gly	Leu	Thr	Leu	Gly	His	Arg	Ala	Pro	Ala	Pro	Trp
65				70					75					80	
Gly	Met	Ser	Trp	His	Asn	His	Arg	Arg	Gln	Val	Asn	Arg	Ile	Lys	Ser
			85						90					95	
Arg	Gln	Cys	Leu	Ser	Met	Ser	Glu	Thr	Ala	Val	Ala	Arg	Ala	Trp	Pro
		100						105					110		
Arg	Ala	Ala	Gly	Pro	Ala	Leu	Ala	Ile	Ser	Pro	Gly	Leu	Ala	Arg	Gly
	115					120					125				
Gly	Leu	Gly	Leu	Thr	Pro	Arg	Thr	Arg	Cys	Pro	Gln	Arg	Val	Pro	His
	130					135					140				

Cys  
 145

&lt;210&gt; 5677

&lt;211&gt; 477

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5677

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300
gccgccgctg ccccgacccc ggatctgcat gtggaagtac ctggacgtcc attccatgca
360
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420
agggtgtcct gagcagagcc tgagcgacgc catcaccctg gacctcttct gccgcgg
477

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&lt;210&gt; 5678

&lt;211&gt; 151

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5678

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Met Ala Ser Leu Arg Leu Cys Ser Gly His Pro Ser Ser Ser Ser Ser
1           5           10           15
Ala Ser Thr Ser Leu Ile Ser Ala Leu Val Val Phe Ser Ser Trp Cys
20           25           30
Met Glu Trp Thr Ser Arg Tyr Phe His Met Gln Ile Arg Gly Arg Gly
35           40           45
Ser Gly Gly Cys Gly Lys Lys Ala Asn Trp Gly Arg Gln Gln Gly Phe
50           55           60
Ser Leu Glu Gln Thr Ser Ala Ala Cys Ala Leu Leu Gln Asp Leu His
65           70           75           80
Lys Ala Cys Ile Ala His Gly His Lys Gln Leu Leu Ser Glu Val Asn
85           90           95
Glu Trp Ile Pro Glu Arg Ala Ser Leu Leu His Leu Ala Phe Pro Thr
100          105          110
Ser Asn Pro Leu Gly Gln Arg Gly Gly Val Leu Pro Leu Leu His Gln
115          120          125
Cys Pro Phe Leu Pro Trp Ser Gln Ala Ala Ser Phe Gln His Arg Pro
130          135          140
Leu Gln Arg Gly Thr Ala Ala
145          150

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&lt;210&gt; 5679

&lt;211&gt; 665

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5679

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 gggaggatct accatgaaga aggtcaagaa gaaaagggtca gaggccagac gccaccggag  
 120  
 tccacctccc agcatgctgg ctccaattcc acctctcagc agcctagccc tgaatccaca  
 180  
 ccacagcagc ctagtcctga atccacacca cagcagccta gccctgaatc cacaccacag  
 240  
 cattccagcc ttgaaaccac ctcccggcag ccagcattcc aagcccttcc agcacccgaa  
 300  
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 360  
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 420  
 gccctcggaa ctgtggctgt ggctctgggg gctctaggag ctgcctacta catcactgaa  
 480  
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 540  
 ataggtgatg gcgctgggag aagatgttca gaatatctca aaagccaagt ccagaagatc  
 600  
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 660  
 aaaaa  
 665

&lt;210&gt; 5680

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5680

Val	Gly	Arg	Ile	Tyr	His	Glu	Glu	Gly	Gln	Glu	Glu	Lys	Val	Arg	Gly
1				5					10					15	
Gln	Thr	Pro	Pro	Asp	Ser	Thr	Ser	Gln	His	Ala	Gly	Ser	Asn	Ser	Thr
		20						25					30		
Ser	Gln	Gln	Pro	Ser	Pro	Glu	Ser	Thr	Pro	Gln	Gln	Pro	Ser	Pro	Glu
	35						40					45			
Ser	Thr	Pro	Gln	Gln	Pro	Ser	Pro	Glu	Ser	Thr	Pro	Gln	His	Ser	Ser
	50					55					60				
Leu	Glu	Thr	Thr	Ser	Arg	Gln	Pro	Ala	Phe	Gln	Ala	Leu	Pro	Ala	Pro
65					70					75				80	
Glu	Ile	Arg	Arg	Ser	Ser	Cys	Cys	Leu	Leu	Ser	Pro	Asp	Ala	Asn	Val
			85						90				95		
Lys	Ala	Ala	Pro	Gln	Ser	Arg	Lys	Ala	Glu	Asn	Leu	Gln	Glu	Asn	Pro
	100						105					110			
Pro	Val	Ile	Val	Thr	Arg	Val	Leu	Gln	Ala	Leu	Gly	Thr	Val	Ala	Val
	115						120					125			
Ala	Leu	Gly	Ala	Leu	Gly	Ala	Tyr	Tyr	Ile	Thr	Glu	Ser	Leu		
	130					135					140				

&lt;210&gt; 5681

&lt;211&gt; 1402

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5681

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gtcggggacct ggtttcggg catgagctga gagcaccacg cggaggccac gagtatttca  
120  
tagacattga tggagcaga aacaaaaact cttcccctgg agaatgcac catcctttca  
180  
gagggctctc tgcaggaagg acaccgatta tggattggca acctggaccc caaaattacc  
240  
gaataccacc tcctcaagct cctccagaag tttggcaagg taaagcagtt tgacttcctc  
300  
ttccacaagt cagggtgcttt ggagggacag cctcgaggct actgttttgt taactttgaa  
360  
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420  
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480  
aagattcttc caatcagtct cgagccatcc tcaagcactg agcctactca gtctaacct  
540  
agtgtcactg caaagataaa agccattgaa gcaaaactga aaatgatggc ggaaaatcct  
600  
gatgcagagt atccagcagc gcctgtttat tcctacttta agccaccaga taaaaaagg  
660  
actactccat attctagaac agcatggaaa tctcgaagat gatggttggt aattactgta  
720  
gcagcaaaag caaattggtc tccacaccta aaatcgtctg cctgtgtact ttgtagatgt  
780  
gaatgggtact attcaacgga gcacaatcac atgttagcat ttggtaacat aatgtttttg  
840  
gatgttctta tggatgttct ttcctaaac tatgtatgga attgagcatc atccagaata  
900  
aatagcgttg tatcccaaat tgtgatttga accctgggat gctctaattg gctggttggt  
960  
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1020  
atattattta aatcaggaaa ctaaaaatat taacatctat taaaaaattg agcatttttc  
1080  
tacgctcgtg tgtcttttac aacataaaga aaaagtaaaa ggcagggagg gaagtgagag  
1140  
acagatttta aatcatgttc agaactgttg ttccagaatt tactacggca atccctccaa  
1200  
ctggactgaa aaagagaaag ttcttgcaa aaaggagctg attctttgaa caaatgttgt  
1260  
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1320  
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1380  
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1402

&lt;210&gt; 5682

&lt;211&gt; 190

&lt;212&gt; PRT

<213> Homo sapiens

<400> 5682

```

Met Glu Ala Glu Thr Lys Thr Leu Pro Leu Glu Asn Ala Ser Ile Leu
 1           5           10           15
Ser Glu Gly Ser Leu Gln Glu Gly His Arg Leu Trp Ile Gly Asn Leu
      20           25           30
Asp Pro Lys Ile Thr Glu Tyr His Leu Leu Lys Leu Leu Gln Lys Phe
      35           40           45
Gly Lys Val Lys Gln Phe Asp Phe Leu Phe His Lys Ser Gly Ala Leu
      50           55           60
Glu Gly Gln Pro Arg Gly Tyr Cys Phe Val Asn Phe Glu Thr Lys Gln
65           70           75           80
Glu Ala Glu Gln Ala Ile Gln Cys Leu Asn Gly Lys Leu Ala Leu Ser
      85           90           95
Lys Lys Leu Val Val Arg Trp Ala His Ala Gln Val Lys Arg Tyr Asp
      100          105          110
His Asn Lys Asn Asp Lys Ile Leu Pro Ile Ser Leu Glu Pro Ser Ser
      115          120          125
Ser Thr Glu Pro Thr Gln Ser Asn Leu Ser Val Thr Ala Lys Ile Lys
      130          135          140
Ala Ile Glu Ala Lys Leu Lys Met Met Ala Glu Asn Pro Asp Ala Glu
145          150          155          160
Tyr Pro Ala Ala Pro Val Tyr Ser Tyr Phe Lys Pro Pro Asp Lys Lys
      165          170          175
Arg Thr Thr Pro Tyr Ser Arg Thr Ala Trp Lys Ser Arg Arg
      180          185          190

```

<210> 5683

<211> 328

<212> DNA

<213> Homo sapiens

<400> 5683

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120
atgctttcag aaggcaccac atgtgatgca cagcctctat ttacatgtga ataattacac
180
tgctgctttc tggttaaaag tagggaaata cagtgttcca gggcatagga atgggtgctct
240
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328

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<210> 5684

<211> 103

<212> PRT

<213> Homo sapiens

<400> 5684

```

Met Lys Phe Val Tyr Phe Lys Ala Leu Leu Thr Lys Pro Ala Ser His

```



```

      1             5             10             15
Gln Gln Asn Lys Leu Phe Tyr Pro Glu His His Ser Tyr Ala Leu Glu
      20             25             30
His Cys Ile Ser Leu Leu Leu Thr Arg Lys Gln Gln Cys Asn Tyr Ser
      35             40             45
His Val Asn Arg Gly Cys Ala Ser His Val Val Pro Ser Glu Ser Ile
      50             55             60
Gly Trp Ile Val Cys Val Pro Trp Leu Met Leu Thr His Gln Tyr Arg
65             70             75             80
Ser Ala Leu Arg Val Cys Arg Asp Gly Gln Cys Leu Thr Ala Glu Ala
      85             90             95
Ser Leu Gly Gln Arg Met Asp
      100

```

&lt;210&gt; 5685

&lt;211&gt; 604

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5685

```

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120
gagcggcagg agtgggaagcg cttcatcgag gagcggctgc tcatgtactc cttcgtcaat
180
gacaagtatg ttccctccca gaggcctga cagacttggg gtccacaggg gaagccagag
240
gtgcccttgg caaggggtgga gctgggggct gggctctgcg gggccctgtg gccatgggag
300
gttgcggggtc ttggtctccag gcagctttga gagtgagacg gatagctcac cacataggag
360
aaatcagacc gggaccaggc aggctgtggg gtggagagag tggctaattt gggagataga
420
gccgtagcac ttatgagggg atgtatgtgg ttgatggttc caggtggcct ctctacgaac
480
caacatggca tctctcgagc agaggccatg ggccagtggg tgcgggctgc catccccga
540
cgacttcagg gagggagttc ccctaaaggt gcccatgggc tgtggccctc tagaccgggg
600
atcc
604

```

&lt;210&gt; 5686

&lt;211&gt; 69

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5686

```

Pro Cys Ser Arg Val Gly Gly Lys Arg Val Val Cys Tyr Asp Asp Arg
1             5             10             15
Phe Ile Val Lys Leu Ala Tyr Glu Ser Asp Gly Ile Val Val Ser Asn
      20             25             30
Asp Thr Tyr Arg Asp Leu Gln Gly Glu Arg Gln Glu Trp Lys Arg Phe

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35 40 45  
 Ile Glu Glu Arg Leu Leu Met Tyr Ser Phe Val Asn Asp Lys Tyr Val  
 50 55 60  
 Pro Ser Gln Arg Pro  
 65

<210> 5687  
 <211> 328  
 <212> DNA  
 <213> Homo sapiens

<400> 5687  
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 120  
 ggtggatccg aaactctggc tgacgggaag agctgtgaga atgtggatga atgtgtgggc  
 180  
 ctgcagccgg tgtgccccca ggggaccaca tgcataca cccgtggaag cttccagtgt  
 240  
 gtcagccctg agtgccccga gggcagcggc aatgtgagct acgtgaagac gtctccattc  
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 cagtgtgagc ggaacccctg ccccatgg  
 328

<210> 5688  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

<400> 5688  
 Thr Leu Ser Arg Pro Arg Gly Ala Gly Lys Gly Gly Gly Asp Gly Gly  
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 Gly Gly Glu Arg Pro Arg Leu Cys Met His Ala Cys Val Asn Thr Pro  
 20 25 30  
 Gly Ser Ser Arg Cys Thr Cys Pro Gly Gly Ser Glu Thr Leu Ala Asp  
 35 40 45  
 Gly Lys Ser Cys Glu Asn Val Asp Glu Cys Val Gly Leu Gln Pro Val  
 50 55 60  
 Cys Pro Gln Gly Thr Thr Cys Ile Asn Thr Gly Gly Ser Phe Gln Cys  
 65 70 75 80  
 Val Ser Pro Glu Cys Pro Glu Gly Ser Gly Asn Val Ser Tyr Val Lys  
 85 90 95  
 Thr Ser Pro Phe Gln Cys Glu Arg Asn Pro Cys Pro Met  
 100 105

<210> 5689  
 <211> 1897  
 <212> DNA  
 <213> Homo sapiens

<400> 5689  
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tgaacaatca gaatcataga agagtgtgag cactgggcct ttgtcttcca ggtgggacag  
120  
tgtgtggtgg tcttcagcca ggctcctagt gggagagccc cactcagccc cagtttgaac  
180  
tctcgcccat cacctatcag tgccactncc tccagctctc gttcctgaaa cccgagagta  
240  
ccgctctcag tctccagtaa gaagcatgga tgaagctcct tgtgttaacg gccgctgggg  
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aacactgaga cccagggctc aaaggcagac tcctcagggt cccgggaagg gagcctttcc  
360  
ccagccagag gagacggctc tcctatcctc aatgggtggga gtttgtctcc aggaacggca  
420  
gctgtgggtg gctcttcttt ggacagtcct gtacaggcca tatctccaag tactccatct  
480  
gctgtgaag gatacgacct gaaaatagga ctttctttgg ccccccgcg aggatcaacc  
540  
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720  
gtctccccag gtgccttgcg tcggagtctg gaagccatca aagcgatgtc ctccaaaggc  
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840  
cagagtttga gcagtggaga aacagtgcc atccctcgcc cagggcctgc ccaaggagat  
900  
ggacattcct tacctcccat tgctcgccgc ctgggccacc accctccaca gtccctaaat  
960  
gttgccaaac ccctatacca gagtatgaac tgcaagcca tgcagatgta cgtgctggag  
1020  
attaaagaca ccaaggagaa ggggcgggtc aaatggaaag tatttaatag cagttctgtg  
1080  
gttggaacct ctgaaaccag cctgcatacc gtggtacaag gcaggggtga actcatcata  
1140  
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1200  
tactttgtac gagcaaagag ataatgtgtt ctaaaccctt ttccttttct gtggctttta  
1260  
atttgaatt ttccagtgtg taagcatttg gactgagaat tgggaaaaca aaattactcc  
1320  
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1380  
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1440  
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1680



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 900  
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 1227

&lt;210&gt; 5692

&lt;211&gt; 86

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5692

Lys	Arg	Lys	Asn	Asn	Cys	His	Gly	Asn	His	Ile	Glu	Met	Gln	Ala	Met
1			5					10					15		
Ala	Glu	Met	Tyr	Asn	Arg	Pro	Val	Glu	Val	Tyr	Gln	Tyr	Ser	Thr	Glu
			20					25				30			
Pro	Ile	Asn	Thr	Phe	His	Gly	Ile	His	Gln	Asn	Glu	Asp	Glu	Pro	Ile
		35					40				45				
Arg	Val	Ser	Tyr	His	Arg	Asn	Ile	His	Tyr	Asn	Ser	Val	Val	Asn	Pro
	50					55				60					
Asn	Lys	Ala	Thr	Ile	Gly	Val	Gly	Leu	Gly	Cys	His	His	Ser	Asn	Gln
65					70				75					80	
Gly	Leu	Gln	Ser	Ser	Leu										
					85										

&lt;210&gt; 5693

&lt;211&gt; 389

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5693

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 120  
 tccaaccccg cagggccctt cgtcgggacg tcccaactta gtcgtcccct gacgcggcct  
 180  
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 240  
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389

<210> 5694  
<211> 60  
<212> PRT  
<213> Homo sapiens

<400> 5694  
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Met Ser Arg Leu Gly Ile Trp Gly Glu Gly Thr Pro Phe Arg Asn Phe  
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Glu Glu Phe Leu His Ala Ile Glu Lys Arg Gly Val Gly Ala Met Glu  
35 40 45  
Ile Val Ala Met Asp Met Lys Val Ser Gly His Val  
50 55 60

<210> 5695  
<211> 1417  
<212> DNA  
<213> Homo sapiens

<400> 5695  
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240  
acggtggggc cctggcgccg cacactgcct gcagagctgc gtgctcgctt ggagcgggtgc  
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840

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 ccccggggac gccctgcat cctctgcgg gctccagaag gcggtgtggg ggatggcggt  
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 1320  
 tcagcagagc ccaggagcga caccgcccgc ccgcccctcc cagacctcgc ccgagtcggc  
 1380  
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 1417

<210> 5696

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5696

Val	Ala	Leu	His	Arg	Ser	Leu	Lys	Pro	Gln	Gly	Gln	Val	Gly	Glu	Gln
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Glu	Glu	Ala	Gly	Ala	Leu	Arg	Gln	Ala	Leu	Thr	Phe	Ser	Leu	Leu	Glu
		20					25					30			
Gln	Pro	Pro	Leu	Glu	Ala	Glu	Glu	Pro	Pro	Asp	Arg	Gly	Thr	Asp	Gly
		35				40					45				
Lys	Ala	Gln	Leu	Val	Val	His	Ser	Ala	Phe	Glu	Gln	Asp	Val	Glu	Glu
	50					55				60					
Leu	Asp	Arg	Ala	Leu	Arg	Ala	Ala	Leu	Glu	Val	His	Val	Gln	Glu	Glu
65					70				75					80	
Thr	Val	Gly	Pro	Trp	Arg	Arg	Thr	Leu	Pro	Ala	Glu	Leu	Arg	Ala	Arg
			85					90					95		
Leu	Glu	Arg	Cys	His	Gly	Val	Ser	Val	Ala	Leu	Arg	Gly	Asp	Cys	Thr
		100						105				110			
Ile	Leu	Arg	Gly	Phe	Gly	Ala	His	Pro	Ala	Arg	Ala	Ala	Arg	His	Leu
	115						120				125				
Val	Ala	Leu	Leu	Ala	Gly	Pro	Trp	Asp	Gln	Ser	Leu	Ala	Phe	Pro	Leu
	130					135					140				
Ala	Ala	Ser	Gly	Pro	Thr	Leu	Ala	Gly	Gln	Thr	Leu	Lys	Gly	Pro	Trp
145				150					155					160	
Asn	Asn	Leu	Glu	Arg	Leu	Ala	Glu	Asn	Thr	Gly	Glu	Phe	Gln	Glu	Val
			165					170					175		
Val	Arg	Ala	Phe	Tyr	Asp	Thr	Leu	Asp	Ala	Ala	Arg	Ser	Ser	Ile	Arg
		180					185					190			
Val	Val	Arg	Val	Glu	Arg	Val	Ser	His	Pro	Leu	Leu	Gln	Gln	Gln	Tyr
	195						200					205			
Glu	Leu	Tyr	Arg	Glu	Arg	Leu	Leu	Gln	Arg	Cys	Glu	Arg	Arg	Pro	Val

210	215	220
Glu Gln Val Leu Tyr His Gly Thr Thr Ala Pro Ala Val Pro Asp Ile		
225	230	235
Cys Ala His Gly Phe Asn Arg Ser Phe Cys Gly Arg Asn Ala Thr Val		240
	245	250
Tyr Gly Lys Gly Val Tyr Phe Ala Arg Arg Ala Ser Leu Ser Val Gln		255
	260	265
Asp Arg Tyr Ser Pro Pro Asn Ala Asp Gly His Lys Ala Val Phe Val		270
	275	280
Ala Arg Val Leu Thr Gly Asp Tyr Gly Gln Gly Arg Arg Gly Leu Arg		285
	290	295
Ala Pro Pro Leu Arg Gly Pro Gly His Val Leu Leu Arg Tyr Asp Ser		300
305	310	315
Ala Val Asp Cys Ile Cys Gln Pro Ser Ile Phe Val Ile Phe His Asp		320
	325	330
Thr Gln Ala Leu Pro Thr His Leu Ile Thr Cys Glu His Val Pro Arg		335
	340	345
Ala Ser Pro Asp Asp Pro Ser Gly Leu Pro Gly Arg Ser Pro Asp Thr		350
	355	360
		365

&lt;210&gt; 5697

&lt;211&gt; 3362

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5697

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 180  
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 240  
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 2460  
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 2760  
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 2820  
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 3360  
 gt  
 3362

&lt;210&gt; 5698

&lt;211&gt; 403

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5698

Met	Phe	Val	Ala	Ser	Glu	Arg	Lys	Met	Arg	Ala	His	Gln	Val	Leu	Thr
1				5				10						15	
Phe	Leu	Leu	Leu	Phe	Val	Ile	Thr	Ser	Val	Ala	Ser	Glu	Asn	Ala	Ser
			20					25					30		
Thr	Ser	Arg	Gly	Cys	Gly	Leu	Asp	Leu	Leu	Pro	Gln	Tyr	Val	Ser	Leu
		35				40						45			
Cys	Asp	Leu	Asp	Ala	Ile	Trp	Gly	Ile	Val	Val	Glu	Ala	Val	Ala	Gly
	50				55					60					
Ala	Gly	Ala	Leu	Ile	Thr	Leu	Leu	Leu	Met	Leu	Ile	Leu	Leu	Val	Arg
65				70				75						80	
Leu	Pro	Phe	Ile	Lys	Glu	Lys	Glu	Lys	Lys	Ser	Pro	Val	Gly	Leu	His
			85				90							95	
Phe	Leu	Phe	Leu	Leu	Gly	Thr	Leu	Gly	Leu	Phe	Gly	Leu	Thr	Phe	Ala
			100				105						110		
Phe	Ile	Ile	Gln	Glu	Asp	Glu	Thr	Ile	Cys	Ser	Val	Arg	Arg	Phe	Leu
	115					120						125			
Trp	Gly	Val	Leu	Phe	Ala	Leu	Cys	Phe	Ser	Cys	Leu	Leu	Ser	Gln	Ala

130		135		140
Trp Arg Val Arg Arg Leu Val Arg His Gly Thr Gly Pro Ala Gly Trp				
145		150		155
Gln Leu Val Gly Leu Ala Leu Cys Leu Met Leu Val Gln Val Ile Ile				160
	165		170	175
Ala Val Glu Trp Leu Val Leu Thr Val Leu Arg Asp Thr Arg Pro Ala				
	180		185	190
Cys Ala Tyr Glu Pro Met Asp Phe Val Met Ala Leu Ile Tyr Asp Met				
	195		200	205
Val Leu Leu Val Val Thr Leu Gly Leu Ala Leu Phe Thr Leu Cys Gly				
	210		215	220
Lys Phe Lys Arg Trp Lys Leu Asn Gly Ala Phe Leu Leu Ile Thr Ala				
225		230		235
Phe Leu Ser Val Leu Ile Trp Val Ala Trp Met Thr Met Tyr Leu Phe				240
	245		250	255
Gly Asn Val Lys Leu Gln Gln Gly Asp Ala Trp Asn Asp Pro Thr Leu				
	260		265	270
Ala Ile Thr Leu Ala Ala Ser Gly Trp Val Phe Val Ile Phe His Ala				
	275		280	285
Ile Pro Glu Ile His Cys Thr Leu Leu Pro Ala Leu Gln Glu Asn Thr				
	290		295	300
Pro Asn Tyr Phe Asp Thr Ser Gln Pro Arg Met Arg Glu Thr Ala Phe				
305		310		315
Glu Glu Asp Val Gln Leu Pro Arg Ala Tyr Met Glu Asn Lys Ala Phe				320
	325		330	335
Ser Met Asp Glu His Asn Ala Ala Leu Arg Thr Ala Gly Phe Pro Asn				
	340		345	350
Gly Ser Leu Gly Lys Arg Pro Ser Gly Ser Leu Gly Lys Arg Pro Ser				
	355		360	365
Ala Pro Phe Arg Ser Asn Val Tyr Gln Pro Thr Glu Met Ala Val Val				
	370		375	380
Leu Asn Gly Gly Thr Ile Pro Thr Ala Pro Pro Ser His Thr Gly Arg				
385		390		395
His Leu Trp				400

&lt;210&gt; 5699

&lt;211&gt; 1565

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5699

tttttttttt tttttttttt tttttttttt ttttttcata gtgaaaccat tttctagaaa

60

atcaaataatt ttattttcat taaaaaaaaa ccttgaataa taggaatcat tttacacatt

120

aatggttgct ctttaaaagt tagaatctca agagatacca aaagcactta agagttacca

180

ccacattttg cccaagttct aaggaaagtt ctgaaactta gtggtggtgt gtttgtaactc

240

agcaagctcc agacagtctg agttgctcat tccatgaaca gaagcttgaa aatgccctta

300

cagttgagat ataaacgagg gaagaggtga agctttcagg aagccagaga gccctgccc

360

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 480  
 gaagttaaag cccaaccagc caaccacctt .cacatccttc tcatactagt agagtcattc  
 540  
 aaaacagcaa gtggtgcttc tgaggcagcc tcaggaaggt ctttgggtgg ctattctaga  
 600  
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 660  
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 720  
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 780  
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 1020  
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 1200  
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 1320  
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 1380  
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 1440  
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 1500  
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 1560  
 gtacc  
 1565

&lt;210&gt; 5700

&lt;211&gt; 197

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5700

Met Val Ala Ile Val Gln Leu Gly Pro Glu Trp His Gly Met Leu Tyr  
 1 5 10 15  
 Ser Gln Ala Asp Ser Lys Lys Lys Ser Asn Leu Met Met Ser Leu Phe  
 20 25 30  
 Glu Pro Gly Pro Glu Pro Leu Pro Trp Leu Gly Lys Met Ala Gln Leu

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      35              40              45
Gly Pro Ile Ser Asp Ala Lys Glu Asn Pro Tyr Gly Glu Asp Asp Asn
  50              55              60
Lys Ser Pro Phe Pro Leu Gln Pro Lys Asn Lys Arg Ser Tyr Ala Gln
  65              70              75              80
Asn Val Thr Val Trp Ile Lys Pro Ser Gly Leu Gln Thr Asp Val Gln
      85              90              95
Lys Ile Leu Arg Asn Ala Arg Lys Leu Pro Glu Lys Thr Gln Thr Phe
      100              105              110
Tyr Lys Glu Leu Asn Arg Leu Arg Lys Ala Ala Leu Ala Phe Gly Phe
      115              120              125
Leu Asp Leu Leu Lys Gly Val Ala Asp Met Leu Glu Arg Glu Cys Thr
      130              135              140
Leu Leu Pro Glu Thr Ala His Pro Asp Ala Ala Phe Gln Leu Thr His
      145              150              155              160
Ala Ala Gln Gln Leu Lys Leu Ala Ser Thr Gly Thr Ser Glu Tyr Ala
      165              170              175
Ala Tyr Asp Gln Asn Ile Thr Pro Leu His Thr Asp Phe Ser Gly Ser
      180              185              190
Ser Thr Glu Arg Ile
      195

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&lt;210&gt; 5701

&lt;211&gt; 1885

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5701

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  240
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  300
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  780

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 1860  
 gcagaaaaaa aaaaaaaaag ttttg  
 1885

&lt;210&gt; 5702

&lt;211&gt; 348

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5702

Met	Asp	Thr	Leu	Glu	Glu	Val	Thr	Trp	Ala	Asn	Gly	Ser	Thr	Ala	Leu
1				5					10					15	
Pro	Pro	Pro	Leu	Ala	Pro	Asn	Ile	Ser	Val	Pro	His	Arg	Cys	Leu	Leu
			20					25					30		
Leu	Leu	Tyr	Glu	Asp	Ile	Gly	Thr	Ser	Arg	Val	Arg	Tyr	Trp	Asp	Leu
		35				40						45			
Leu	Leu	Leu	Ile	Pro	Asn	Val	Leu	Phe	Leu	Ile	Phe	Leu	Leu	Trp	Lys
	50				55					60					
Leu	Pro	Ser	Ala	Arg	Ala	Lys	Ile	Arg	Ile	Thr	Ser	Ser	Pro	Ile	Phe

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65          70          75          80
Ile Thr Phe Tyr Ile Leu Val Phe Val Val Ala Leu Val Gly Ile Ala
          85          90          95
Arg Ala Val Val Ser Met Thr Val Ser Thr Ser Asn Ala Ala Thr Val
          100          105          110
Ala Asp Lys Ile Leu Trp Glu Ile Thr Arg Phe Phe Leu Leu Ala Ile
          115          120          125
Glu Leu Ser Val Ile Ile Leu Gly Leu Ala Phe Gly His Leu Glu Ser
          130          135          140
Lys Ser Ser Ile Lys Arg Val Leu Ala Ile Thr Thr Val Leu Ser Leu
          145          150          155          160
Ala Tyr Ser Val Thr Gln Gly Thr Leu Glu Ile Leu Tyr Pro Asp Ala
          165          170          175
His Leu Ser Ala Glu Asp Phe Asn Ile Tyr Gly His Gly Gly Arg Gln
          180          185          190
Phe Trp Leu Val Ser Ser Cys Phe Phe Phe Leu Val Tyr Ser Leu Val
          195          200          205
Val Ile Leu Pro Lys Thr Pro Leu Lys Glu Arg Ile Ser Leu Pro Ser
          210          215          220
Arg Arg Ser Phe Tyr Val Tyr Ala Gly Ile Leu Ala Leu Leu Asn Leu
          225          230          235          240
Leu Gln Gly Leu Gly Ser Val Leu Leu Cys Phe Asp Ile Ile Glu Gly
          245          250          255
Leu Cys Cys Val Asp Ala Thr Thr Phe Leu Tyr Phe Ser Phe Phe Ala
          260          265          270
Pro Leu Ile Tyr Val Ala Phe Leu Arg Gly Phe Phe Gly Ser Glu Pro
          275          280          285
Lys Ile Leu Phe Xaa Leu Gln Met Pro Ser Gly Arg Asp Arg Gly Ala
          290          295          300
Arg Cys Thr Pro Thr Pro Ala Leu Arg Cys Gly Pro Ala Gly Gly Pro
          305          310          315          320
Gly Gly Cys Arg Gly Cys Trp Gly Leu Ser Cys Gln Leu Leu Glu His
          325          330          335
Ala Val Arg Leu Cys Arg Arg Gly Gly Leu Pro Gly
          340          345

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&lt;210&gt; 5703

&lt;211&gt; 1496

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5703

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120
tgagcagata ccttaagaat cttttagagc aggaccacgt acaagggcaa atcctccttc
180
cagacctact cggactacct gcgctgggag agcttctctc agcagcagct gcaggccttg
240
cccgagggct cagtctcgcg cgggggcttc cagacctgcg agcactggaa gcagatattc
300
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360

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 540  
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 720  
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 780  
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&lt;210&gt; 5710

&lt;211&gt; 441

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5710

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			20					25				30			
Lys	Lys	Leu	Trp	Val	Met	Asn	Ser	Gln	Val	Ser	Leu	Ile	Glu	Arg	Asn
		35				40					45				
Ala	Phe	Asp	Gly	Leu	Ala	Ser	Leu	Val	Glu	Leu	Asn	Leu	Ala	His	Asn

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 Leu Trp Leu Ala Trp Trp Leu Arg Glu Tyr Ile Pro Thr Asn Ser Thr  
 100 105 110  
 Cys Cys Gly Arg Cys His Ala Pro Met His Met Arg Gly Arg Tyr Leu  
 115 120 125  
 Val Glu Val Asp Gln Ala Ser Phe Gln Cys Ser Ala Pro Phe Ile Met  
 130 135 140  
 Asp Ala Pro Arg Asp Leu Asn Ile Ser Glu Gly Arg Met Ala Glu Leu  
 145 150 155 160  
 Lys Cys Arg Thr Pro Pro Met Ser Ser Val Lys Trp Leu Leu Pro Asn  
 165 170 175  
 Gly Thr Val Leu Ser His Ala Ser Arg His Pro Arg Ile Ser Val Leu  
 180 185 190  
 Asn Asp Gly Thr Leu Asn Phe Ser His Val Leu Leu Ser Asp Thr Gly  
 195 200 205  
 Val Tyr Thr Cys Met Val Thr Asn Val Ala Gly Asn Ser Asn Ala Ser  
 210 215 220  
 Ala Tyr Leu Asn Val Ser Thr Ala Glu Leu Asn Thr Ser Asn Tyr Ser  
 225 230 235 240  
 Phe Phe Thr Thr Val Thr Val Glu Thr Thr Glu Ile Ser Pro Glu Asp  
 245 250 255  
 Thr Thr Arg Lys Tyr Lys Pro Val Pro Thr Thr Ser Thr Gly Tyr Gln  
 260 265 270  
 Pro Ala Tyr Thr Thr Ser Thr Thr Val Leu Ile Gln Thr Thr Arg Val  
 275 280 285  
 Pro Lys Gln Val Ala Val Pro Ala Thr Asp Thr Thr Asp Lys Met Gln  
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 Thr Ser Leu Asp Glu Val Met Lys Thr Thr Lys Ile Ile Gly Cys  
 305 310 315 320  
 Phe Val Ala Val Thr Leu Leu Ala Ala Ala Met Leu Ile Val Phe Tyr  
 325 330 335  
 Lys Leu Arg Lys Arg His Gln Gln Arg Ser Thr Val Thr Ala Ala Arg  
 340 345 350  
 Thr Val Glu Ile Ile Gln Val Asp Glu Asp Ile Pro Ala Ala Thr Ser  
 355 360 365  
 Ala Ala Ala Thr Ala Ala Pro Ser Gly Val Ser Gly Glu Gly Ala Val  
 370 375 380  
 Val Leu Pro Thr Ile His Asp His Ile Asn Tyr Asn Thr Tyr Lys Pro  
 385 390 395 400  
 Ala His Gly Ala His Trp Thr Glu Asn Ser Leu Gly Asn Ser Leu His  
 405 410 415  
 Pro Thr Val Thr Thr Ile Ser Glu Pro Tyr Ile Ile Gln Thr His Thr  
 420 425 430  
 Lys Asp Lys Val Gln Glu Thr Gln Ile  
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&lt;210&gt; 5711

&lt;211&gt; 1142

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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 180  
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 300  
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 1142

<210> 5712  
 <211> 145  
 <212> PRT  
 <213> Homo sapiens

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 Tyr Tyr Leu Ile Gln Lys Phe His Ser Arg Ala Leu Tyr Tyr Lys Leu  
 35 40 45

Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu Gly  
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 Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn Phe  
 65 70 75 80  
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 85 90 95  
 Ser Glu Gly Leu Leu Tyr Val His Ser Ser Arg Gly Gly Pro Phe Gln  
 100 105 110  
 Arg Trp His Leu Asp Glu Val Phe Leu Glu Leu Lys Asp Gly Gln Gln  
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<210> 5713

<211> 1996

<212> DNA

<213> Homo sapiens

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 180  
 acggaaatgc gcgagatgga cctgcaggtg cagaatgcaa tggatcaact agaacaaaga  
 240  
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 420  
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 480  
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 780  
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 900  
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 1980  
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 1996

&lt;210&gt; 5714

&lt;211&gt; 408

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5714

Ile	Glu	Gln	Leu	Pro	Met	Asp	Leu	Arg	Asp	Arg	Phe	Thr	Glu	Met	Arg
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Glu	Met	Asp	Leu	Gln	Val	Gln	Asn	Ala	Met	Asp	Gln	Leu	Glu	Gln	Arg
		20					25					30			
Val	Ser	Glu	Phe	Phe	Met	Asn	Ala	Lys	Lys	Asn	Lys	Pro	Glu	Trp	Arg
		35				40					45				
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		50				55				60					
Asp	Ala	Asp	Glu	Lys	Val	Gln	Leu	Ala	Asn	Gln	Ile	Tyr	Asp	Leu	Val
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Asp	Arg	His	Leu	Arg	Lys	Leu	Asp	Gln	Glu	Leu	Ala	Lys	Phe	Lys	Met

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180
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&lt;210&gt; 5716

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5716

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Val Cys Cys Leu Cys Ala Gly Tyr Phe Val Asp Ala Thr Thr Ile Thr

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 35 40 45  
 Thr Ser Lys Tyr Cys Pro Met Cys Asn Ile Lys Ile His Glu Thr Gln  
 50 55 60  
 Pro Leu Leu Asn Leu Lys Leu Asp Arg Val Met Gln Asp Ile Val Tyr  
 65 70 75 80  
 Lys Leu Val Pro Gly Leu Gln Asp Ser Glu Glu Lys Arg Ile Arg Glu  
 85 90 95  
 Phe Tyr Gln Ser Arg Gly Leu Asp Arg Val Thr Gln Pro Thr Gly Glu  
 100 105 110  
 Glu Pro Ala Leu Ser Asn Leu Gly Leu Pro Phe Ser Ser Phe Asp His  
 115 120 125  
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 130 135 140  
 Glu Arg Leu Arg  
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<210> 5717

<211> 1419

<212> DNA

<213> Homo sapiens

<400> 5717

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 900



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<210> 5718

<211> 228

<212> PRT

<213> Homo sapiens

<400> 5718

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			20					25					30		
Thr	Val	His	Gly	Asn	Val	Ile	Thr	Thr	Asn	Thr	Ile	Phe	Glu	Asn	Leu
			35					40					45		
Trp	Phe	Ser	Cys	Ala	Thr	Asp	Ser	Leu	Gly	Val	Tyr	Asn	Cys	Trp	Glu
			50					55					60		
Phe	Pro	Ser	Met	Leu	Ala	Leu	Ser	Gly	Tyr	Ile	Gln	Ala	Cys	Arg	Ala
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Leu	Met	Ile	Thr	Ala	Ile	Leu	Leu	Gly	Phe	Leu	Gly	Leu	Leu	Leu	Gly
				85					90					95	
Ile	Ala	Gly	Leu	Arg	Cys	Thr	Asn	Ile	Gly	Gly	Leu	Glu	Leu	Ser	Arg
			100					105						110	
Lys	Ala	Lys	Leu	Ala	Ala	Thr	Ala	Gly	Ala	Leu	His	Ile	Leu	Ala	Gly
			115					120						125	
Ile	Cys	Gly	Met	Val	Ala	Ile	Ser	Trp	Tyr	Ala	Phe	Asn	Ile	Thr	Arg
			130					135						140	
Asp	Phe	Phe	Asp	Pro	Leu	Tyr	Pro	Gly	Thr	Lys	Tyr	Glu	Leu	Gly	Pro
145				150						155				160	
Ala	Leu	Tyr	Leu	Gly	Trp	Ser	Ala	Ser	Leu	Ile	Ser	Ile	Leu	Gly	Gly
				165					170					175	
Leu	Cys	Leu	Cys	Ser	Ala	Cys	Cys	Cys	Gly	Ser	Asp	Glu	Asp	Pro	Ala
			180						185					190	
Ala	Ser	Ala	Arg	Arg	Pro	Tyr	Gln	Ala	Pro	Val	Ser	Val	Met	Pro	Val
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Ala	Thr	Ser	Asp	Gln	Glu	Gly	Asp	Ser	Ser	Phe	Gly	Lys	Tyr	Gly	Arg
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Asn	Ala	Tyr	Val												

225

&lt;210&gt; 5719

&lt;211&gt; 2267

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5719

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1260  
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1320  
ttcatcgga agaggaattt tgaacatttc cttcttcagt atctgcagcc tcgacctggt  
1380

cactttattt ccatagaaga caataagggtt ctgggaacac ataaagggtt gttcctgtat  
 1440  
 accttggggc agagagcaaa cataggtggc ctgagagagc cctggtacgt ggtggagaag  
 1500  
 gacagcgtca aggggtgacgt gtttgtggcc ccccgacag accaccagc cctgtacagg  
 1560  
 gacctgctga ggaccagccg cgtgcactgg attgcggagg agcctcccgc agcactggtc  
 1620  
 cgggacaaga tgatggagtg ccacttccga ttccgccacc agatggcact agtgccctgt  
 1680  
 gtgtgaccc tcaatcaaga tggcaccgtg tgggtgacag ctgtgcaggc tgtgctgccc  
 1740  
 cttgccacag gacagtttgc tgtgttctac aagggggacg agtgccctggg cagcgggaag  
 1800  
 atcctgccc tggggccgtc tgcctacag ctccagaagg gccagcgcag agctgggatg  
 1860  
 gccactgaga gccccagtga cagcccagaa gatggtccag gcctgagtcc cttgctctga  
 1920  
 cagagatgga tctgctagaa ggaacctgga gagcaggacc catggctggg cggctggtga  
 1980  
 gcagtccagg tgcccaaggg ccagcttgct gctgcccagg gcagaggaag ccgggctggc  
 2040  
 tgagggtccg aaaagcctgc agggggcccg cgagccccag gaagagcctc agtccaggc  
 2100  
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 2160  
 gccccaggg agggtttccc acctcagagt acaccgaggg gacctgcaga gggggctgtc  
 2220  
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 2267

<210> 5720

<211> 455

<212> PRT

<213> Homo sapiens

<400> 5720

Val	Pro	Val	Leu	His	Lys	His	Pro	Cys	His	Leu	Val	Thr	Ser	Pro	Pro
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Gln	Gln	Gln	Arg	Gly	His	Gly	Ala	Val	His	Ala	Ala	Gly	Gln	Gly	Ala
			20					25					30		
His	Asp	Val	Pro	Gln	Gly	Leu	His	Pro	Pro	Val	Ala	Pro	Ser	Gly	Gly
		35					40					45			
Val	Asp	Ser	Ala	Val	Ala	Ala	Leu	Leu	Leu	Arg	Arg	Arg	Gly	Tyr	Gln
		50				55					60				
Val	Thr	Gly	Val	Phe	Met	Lys	Asn	Trp	Asp	Ser	Leu	Asp	Glu	His	Gly
65					70					75				80	
Val	Cys	Thr	Ala	Asp	Lys	Asp	Cys	Glu	Asp	Ala	Tyr	Arg	Val	Cys	Gln
			85					90						95	
Ile	Leu	Asp	Ile	Pro	Phe	His	Gln	Val	Ser	Tyr	Val	Lys	Glu	Tyr	Trp
			100					105					110		
Asn	Asp	Val	Phe	Ser	Asp	Phe	Leu	Asn	Glu	Tyr	Glu	Lys	Gly	Arg	Thr
		115					120					125			
Pro	Asn	Pro	Asp	Ile	Val	Cys	Asn	Lys	His	Ile	Lys	Phe	Ser	Cys	Phe

130 135 140  
 Phe His Tyr Ala Val Asp Asn Leu Gly Ala Asp Ala Ile Ala Thr Gly  
 145 150 155 160  
 His Tyr Ala Arg Thr Ser Leu Glu Asp Glu Glu Val Phe Glu Gln Lys  
 165 170 175  
 His Val Lys Lys Pro Glu Gly Leu Phe Arg Asn Arg Phe Glu Val Arg  
 180 185 190  
 Asn Ala Val Lys Leu Leu Gln Ala Ala Asp Ser Phe Lys Asp Gln Thr  
 195 200 205  
 Phe Phe Leu Ser Gln Val Ser Gln Asp Ala Leu Arg Arg Thr Ile Phe  
 210 215 220  
 Pro Leu Gly Gly Leu Thr Lys Glu Phe Val Lys Lys Ile Ala Ala Glu  
 225 230 235 240  
 Asn Arg Leu His His Val Leu Gln Lys Lys Glu Ser Met Gly Met Cys  
 245 250 255  
 Phe Ile Gly Lys Arg Asn Phe Glu His Phe Leu Leu Gln Tyr Leu Gln  
 260 265 270  
 Pro Arg Pro Gly His Phe Ile Ser Ile Glu Asp Asn Lys Val Leu Gly  
 275 280 285  
 Thr His Lys Gly Trp Phe Leu Tyr Thr Leu Gly Gln Arg Ala Asn Ile  
 290 295 300  
 Gly Gly Leu Arg Glu Pro Trp Tyr Val Val Glu Lys Asp Ser Val Lys  
 305 310 315 320  
 Gly Asp Val Phe Val Ala Pro Arg Thr Asp His Pro Ala Leu Tyr Arg  
 325 330 335  
 Asp Leu Leu Arg Thr Ser Arg Val His Trp Ile Ala Glu Glu Pro Pro  
 340 345 350  
 Ala Ala Leu Val Arg Asp Lys Met Met Glu Cys His Phe Arg Phe Arg  
 355 360 365  
 His Gln Met Ala Leu Val Pro Cys Val Leu Thr Leu Asn Gln Asp Gly  
 370 375 380  
 Thr Val Trp Val Thr Ala Val Gln Ala Val Arg Ala Leu Ala Thr Gly  
 385 390 395 400  
 Gln Phe Ala Val Phe Tyr Lys Gly Asp Glu Cys Leu Gly Ser Gly Lys  
 405 410 415  
 Ile Leu Arg Leu Gly Pro Ser Ala Tyr Thr Leu Gln Lys Gly Gln Arg  
 420 425 430  
 Arg Ala Gly Met Ala Thr Glu Ser Pro Ser Asp Ser Pro Glu Asp Gly  
 435 440 445  
 Pro Gly Leu Ser Pro Leu Leu  
 450 455

&lt;210&gt; 5721

&lt;211&gt; 400

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5721

ttagacatag ctaaccagac aggcagatca atcagaattc ccccatcaga aagaaaagcc  
 60  
 cttatgttag ctatgggata tcatgagaag ggcagagctt tcctgaaaag aaaagaatat  
 120  
 ggaatagcct tgccatgtct gttggacgct gacaaatatt tctggtgggc gcttttgtac  
 180

ttggtgaaca ccagctttaa ggaagatggc ccagactata cagaacacct gccatgccct  
 240  
 tgagactgca gactttcatc tacaacagtg gttaatgtaa aagagtagtt atggtgtaaa  
 300  
 ctggtgaatt tcttcttccc ttgtatttc taattgacct ttcctccctg taaagaaaag  
 360  
 aattttcaag caggtaggat atgctctctt tttctgtaca  
 400

<210> 5722

<211> 80

<212> PRT

<213> Homo sapiens

<400> 5722

Leu	Asp	Ile	Ala	Asn	Gln	Thr	Gly	Arg	Ser	Ile	Arg	Ile	Pro	Pro	Ser
1				5					10					15	
Glu	Arg	Lys	Ala	Leu	Met	Leu	Ala	Met	Gly	Tyr	His	Glu	Lys	Gly	Arg
			20					25					30		
Ala	Phe	Leu	Lys	Arg	Lys	Glu	Tyr	Gly	Ile	Ala	Leu	Pro	Cys	Leu	Leu
		35					40					45			
Asp	Ala	Asp	Lys	Tyr	Phe	Trp	Trp	Ala	Leu	Leu	Tyr	Leu	Val	Asn	Thr
	50					55					60				
Ser	Phe	Lys	Glu	Asp	Gly	Pro	Asp	Tyr	Thr	Glu	His	Leu	Pro	Cys	Pro
65					70					75				80	

<210> 5723

<211> 376

<212> DNA

<213> Homo sapiens

<400> 5723

nntaccacat tttcttcttt tcacccaccc cagccaaaac tcagtgccct caaggctcgg  
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 aagaatgtgg agagttttct agaagcctgt cgaaaaatgg ggggtgcctga ggtatggggg  
 120  
 ctgctttcta aagagtgggtg gcatgccgga ctcagcggag ccatgtggca tggatgggtg  
 180  
 gcttccattt gcagcggatg tctgctctca gatgaaggca caggctgccc ctgcctgccc  
 240  
 cagcatgccc cctgccctgc atgccccctg ccctgcatgt cacctgtcct acacatcccc  
 300  
 tgcctgcag gcccatctt gtctgcatg tcacctgtcc tgcacatgcc ctgcctgca  
 360  
 ctctctctgc acgcgt  
 376

<210> 5724

<211> 125

<212> PRT

<213> Homo sapiens

<400> 5724

Xaa Thr Thr Phe Ser Ser Phe His Pro Pro Gln Pro Lys Leu Ser Ala

1	5	10	15
Leu Lys Ala Arg Lys Asn Val Glu Ser Phe Leu Glu Ala Cys Arg Lys			
	20	25	30
Met Gly Val Pro Glu Val Trp Gly Leu Leu Ser Lys Glu Trp Trp His			
	35	40	45
Ala Gly Leu Ser Gly Ala Met Trp His Gly Trp Trp Ala Ser Ile Cys			
	50	55	60
Ser Gly Cys Leu Leu Ser Asp Glu Gly Thr Gly Cys Pro Cys Leu Pro			
65	70	75	80
Gln His Ala Pro Cys Pro Ala Cys Pro Leu Pro Cys Met Ser Pro Val			
	85	90	95
Leu His Ile Pro Cys Pro Ala Gly Pro Ile Leu Ser Cys Met Ser Pro			
	100	105	110
Val Leu His Met Pro Cys Pro Ala Leu Leu Leu His Ala			
	115	120	125

&lt;210&gt; 5725

&lt;211&gt; 1160

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5725

gcttttttttc cttttctccc tccggtcttc ctttttgact ccctcccct ttatgctcgc  
60  
ccagccctcc ccctgctgct gagaagtggg ggaggggtctc ggcctccagg ttcccgcccc  
120  
accgcgcacg ggcgagcatg gggggcaagc agagcacggc gaccgcgtcc cgggggcccc  
180  
ttccgggggg tctccaccga tgacagcgcc gtgccgcgcg cgggaggggc gccccatttc  
240  
gggcactacc ggacggggcg cggggccatg gggctgcgca gcgcatcggc cagctcgggt  
300  
gcaggcatgg gcatggaccc cagcacggcc ggggggggtgc cttttggcct ctacaccccc  
360  
gcctcccggg gcaccggcga ctccgagagg gcgcccggcg gcggaggggc tgcgtccgac  
420  
tccacctatg cccatggcaa tggttaccag gagacgggcg gcggtcacca tagagacggg  
480  
atgctgtacc tgggtcccg agcctcgctg gcggatgctc tacctctgca catcgacccc  
540  
aggtggttca gctcgcatag tggtttcaag tgccccattt gctccaagtc tgtggcttct  
600  
gacgagatgg aaatgcactt tataatgtgt ttgagcaaac ctgcctctc ctacaacgat  
660  
gatgtgctga ctaaagacgc gggtagtgt gtgatctgcc tggaggagct gctgcagggg  
720  
gacacgatag ccaggctgcc ctgcctgtgc atctatcaca aaagctgcat agactcgtgg  
780  
tttgaagtga acagatcttg tccggaacac cctgcggact gacctgcggg cttgcttgct  
840  
gactcctctc aaagggacag agcgccctg ctccagggag gaggtccacc ggaccctggg  
900  
gcagagctga gcttgggaca ccagcgggaa cagggcacc cttctgcact gacttccaga  
960

tcattggttct cccttcctcc ctgaggacac caaattggat gagagcaagt ttgagagaag  
 1020  
 aatgaatcaa ctgctatcct tcccctcacc cctcagccca ggagggaaaag ggcattttct  
 1080  
 ttttcatctt tgaaaggcat tgtgggtctg tcttttaaagt gtttacaaaa aaattatata  
 1140  
 aaaaaaagtc tagtgctgac  
 1160

<210> 5726

<211> 273

<212> .PRT

<213> Homo sapiens

<400> 5726

Ala	Phe	Phe	Pro	Phe	Leu	Pro	Pro	Arg	Leu	Leu	Phe	Asp	Ser	Leu	Pro
1				5					10					15	
Leu	Tyr	Ala	Arg	Pro	Ala	Leu	Pro	Leu	Leu	Leu	Arg	Ser	Gly	Gly	Gly
			20					25					30		
Ser	Arg	Pro	Pro	Gly	Ser	Arg	Pro	Thr	Ala	His	Gly	Arg	Ala	Trp	Gly
			35				40					45			
Ala	Ser	Arg	Ala	Arg	Arg	Pro	Ala	Pro	Gly	Gly	Pro	Phe	Pro	Gly	Val
			50			55					60				
Ser	Thr	Asp	Asp	Ser	Ala	Val	Pro	Pro	Pro	Gly	Gly	Ala	Pro	His	Phe
65					70					75				80	
Gly	His	Tyr	Arg	Thr	Gly	Gly	Gly	Ala	Met	Gly	Leu	Arg	Ser	Ala	Ser
				85					90					95	
Val	Ser	Ser	Val	Ala	Gly	Met	Gly	Met	Asp	Pro	Ser	Thr	Ala	Gly	Gly
			100					105					110		
Val	Pro	Phe	Gly	Leu	Tyr	Thr	Pro	Ala	Ser	Arg	Gly	Thr	Gly	Asp	Ser
			115				120					125			
Glu	Arg	Ala	Pro	Gly	Gly	Gly	Gly	Ser	Ala	Ser	Asp	Ser	Thr	Tyr	Ala
			130				135					140			
His	Gly	Asn	Gly	Tyr	Gln	Glu	Thr	Gly	Gly	Gly	His	His	Arg	Asp	Gly
145					150					155				160	
Met	Leu	Tyr	Leu	Gly	Ser	Arg	Ala	Ser	Leu	Ala	Asp	Ala	Leu	Pro	Leu
				165					170					175	
His	Ile	Ala	Pro	Arg	Trp	Phe	Ser	Ser	His	Ser	Gly	Phe	Lys	Cys	Pro
			180					185					190		
Ile	Cys	Ser	Lys	Ser	Val	Ala	Ser	Asp	Glu	Met	Glu	Met	His	Phe	Ile
			195				200					205			
Met	Cys	Leu	Ser	Lys	Pro	Arg	Leu	Ser	Tyr	Asn	Asp	Asp	Val	Leu	Thr
			210			215						220			
Lys	Asp	Ala	Gly	Glu	Cys	Val	Ile	Cys	Leu	Glu	Glu	Leu	Leu	Gln	Gly
225					230					235				240	
Asp	Thr	Ile	Ala	Arg	Leu	Pro	Cys	Leu	Cys	Ile	Tyr	His	Lys	Ser	Cys
				245					250					255	
Ile	Asp	Ser	Trp	Phe	Glu	Val	Asn	Arg	Ser	Cys	Pro	Glu	His	Pro	Ala
			260					265					270		

Asp

<210> 5727

<211> 1237

<212> DNA

<213> Homo sapiens

<400> 5727

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ggggccacca tgtcatcata tcagaaggaa ctggagaaat acagagacat agatgaagat  
120  
gagatcctaa ggaccttgag ccccgaggag ctagagcagc tggactgcga actacaggag  
180  
atggatcctg agaacatgct cctgccagct ggactaagac aacgtgacca gacaagaag  
240  
agcccaacgg ggccactgga ccgagaggcc cttttgcagt acttggagca acaggcacta  
300  
gaagtcaaag agcgtgatga cttggtgccc ttcacaggcg agaagaaggg gaaaccctat  
360  
attcagccca agagggaaat cccagcagag gaggagatca ccctggagcc tgagctggag  
420  
gaggcactgg cacatgccac agatgctgaa atgtgtgaca ttgcagcaat tctggacatg  
480  
tacacactga tgagtaacaa gcaatactat gatgccctct gcagtggaga aatctgcaac  
540  
actgaaggca ttagcagtgt ggtacagcct gacaagtata agccagtgcc ggatgaaccc  
600  
ccaaatccca caaacattga ggagatacta aagagggtcc gaagcaatga caaggagctg  
660  
gaggagggtga acttgaataa tatacaggac atccaatac ccatgctaag tgagctgtgt  
720  
gaggcaatga aggcaaatac ctatgtgcgg agcttcagtc tggtagccac gaggagtgg  
780  
gaccccatg ccaatgcagt ggctgacatg ttgcgtgaga atcgtagcct ccagagccta  
840  
aacatcgaat ccaacttcat tagcagcaca ggactcatgg ctgtgctgaa ggcagttcgg  
900  
gaaaatgcc aactcactga gctccgtgta gacaatcagc gccagtggcc tggatgatgca  
960  
gtggagatgg agatggccac cgtgctagag cagtgtccct ctattgtccg ctttggctac  
1020  
cactttacac agcagggggc acgagctcgg gcagcccagg ccatgaccgg aaacaatgaa  
1080  
ctacgtcgcc agcaaaagaa gagataacac tgcatttccc ttaccaact agcgtgga  
1140  
gcactggaca cttaaactct catctgtcct ctttctctgt aaataaaagc ctttctatcc  
1200  
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa  
1237

<210> 5728

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5728

Xaa Arg Arg Glu Val Thr Thr Arg Thr Gly Ser Val Ser Thr Thr Gln



1	5	10	15
Trp Glu Gly Val Gly Ala Thr Met Ser Ser Tyr Gln Lys Glu Leu Glu			
20	25	30	
Lys Tyr Arg Asp Ile Asp Glu Asp Glu Ile Leu Arg Thr Leu Ser Pro			
35	40	45	
Glu Glu Leu Glu Gln Leu Asp Cys Glu Leu Gln Glu Met Asp Pro Glu			
50	55	60	
Asn Met Leu Leu Pro Ala Gly Leu Arg Gln Arg Asp Gln Thr Lys Lys			
65	70	75	80
Ser Pro Thr Gly Pro Leu Asp Arg Glu Ala Leu Leu Gln Tyr Leu Glu			
85	90	95	
Gln Gln Ala Leu Glu Val Lys Glu Arg Asp Asp Leu Val Pro Phe Thr			
100	105	110	
Gly Glu Lys Lys Gly Lys Pro Tyr Ile Gln Pro Lys Arg Glu Ile Pro			
115	120	125	
Ala Glu Glu Gln Ile Thr Leu Glu Pro Glu Leu Glu Glu Ala Leu Ala			
130	135	140	
His Ala Thr Asp Ala Glu Met Cys Asp Ile Ala Ala Ile Leu Asp Met			
145	150	155	160
Tyr Thr Leu Met Ser Asn Lys Gln Tyr Tyr Asp Ala Leu Cys Ser Gly			
165	170	175	
Glu Ile Cys Asn Thr Glu Gly Ile Ser Ser Val Val Gln Pro Asp Lys			
180	185	190	
Tyr Lys Pro Val Pro Asp Glu Pro Pro Asn Pro Thr Asn Ile Glu Glu			
195	200	205	
Ile Leu Lys Arg Val Arg Ser Asn Asp Lys Glu Leu Glu Glu Val Asn			
210	215	220	
Leu Asn Asn Ile Gln Asp Ile Pro Ile Pro Met Leu Ser Glu Leu Cys			
225	230	235	240
Glu Ala Met Lys Ala Asn Thr Tyr Val Arg Ser Phe Ser Leu Val Ala			
245	250	255	
Thr Arg Ser Gly Asp Pro Ile Ala Asn Ala Val Ala Asp Met Leu Arg			
260	265	270	
Glu Asn Arg Ser Leu Gln Ser Leu Asn Ile Glu Ser Asn Phe Ile Ser			
275	280	285	
Ser Thr Gly Leu Met Ala Val Leu Lys Ala Val Arg Glu Asn Ala Thr			
290	295	300	
Leu Thr Glu Leu Arg Val Asp Asn Gln Arg Gln Trp Pro Gly Asp Ala			
305	310	315	320
Val Glu Met Glu Met Ala Thr Val Leu Glu Gln Cys Pro Ser Ile Val			
325	330	335	
Arg Phe Gly Tyr His Phe Thr Gln Gln Gly Pro Arg Ala Arg Ala Ala			
340	345	350	
Gln Ala Met Thr Arg Asn Asn Glu Leu Arg Arg Gln Gln Lys Lys Arg			
355	360	365	

&lt;210&gt; 5729

&lt;211&gt; 381

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5729

naaattttatt actacggatc acagcagcaa cgggcgggaa gggcgggcgcc agactcattt

60

gccccgcagg tagatcttgg gggctcgcca gccttcgggg gcttccttta gccccgcctt  
 120  
 cagccagatg cgcctcaggt ctttctcgaa cttgatctgc aagacgcaga gagagggacc  
 180  
 gccaaagtaat tcgtggcaaa gaaacgtgtt ctcagcactt tgccctccca ggccaagca  
 240  
 gggggccact cacctgcttg cgtctcaggc gtccctcctg gaccttcctc cgcaggaacc  
 300  
 gcgtcttctt caccagcttc cggtaactgt ggtgggtcat cttccgcgg cggtatcttca  
 360  
 gcacgttttt gcactaaatt t  
 381

<210> 5730

<211> 64

<212> PRT

<213> Homo sapiens

<400> 5730

Phe	Val	Ala	Lys	Lys	Arg	Val	Leu	Ser	Thr	Leu	Pro	Ser	Gln	Gly	Gln
1				5					10					15	
Ala	Gly	Gly	His	Ser	Pro	Ala	Cys	Val	Ser	Gly	Val	Pro	Pro	Gly	Pro
			20				25					30			
Ser	Ser	Ala	Gly	Thr	Ala	Ser	Ser	Ser	Pro	Ala	Ser	Gly	Thr	Cys	Gly
		35					40					45			
Gly	Ser	Ser	Ser	Ala	Gly	Gly	Ser	Ser	Ala	Arg	Phe	Cys	Thr	Lys	Phe
	50					55					60				

<210> 5731

<211> 891

<212> DNA

<213> Homo sapiens

<400> 5731

ccggccgcgt ccaggctgcg ggccgaagcc gggctcgggg cgctgccgcg gcgggcgctc  
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 gccagtgact tgctcttctt ggggtctctac ccggtgctca ccaaggcggc caccagtggc  
 120  
 atttgtcag cacttgggaa cttcttgccc cagatgattg agaagaagcg gaaaaaagaa  
 180  
 aactctagaa gtctggatgt cgggtggcct ctgagatatg ccgtttacgg gttcttcttc  
 240  
 acagggccgc tgagtcactt cttctacttc ttcattgaac attggatccc tctgaggtc  
 300  
 cccctggcag ggctcaggag gcttctcctg gaccgcctcg tctttgcacc ggccttcctc  
 360  
 atgttgttct tctcatcat gaactttctg gaggggaaag acgcctcagc cttcgccgcc  
 420  
 aagatgaggg ggggcttctg gccggcgctg aggatgaact ggcggtgtg gacgccacta  
 480  
 cagttcatca acatcaacta cgtccctctg aagttccggg tgctcttcgc caacctggca  
 540  
 gctctgttct ggtatgccta cctggcctcc ttggggaagt gacgaccgct gggagaacat  
 600

caggtgcact gtggacgtgg gtctgggggt ctcacccgcc cagcgagagc agaaccaatc  
 660  
 cagtcaggat gtcactgact ctaaatacagg tgattcaaga tgcccaaaaa tgatggatag  
 720  
 agaaacagaa atctctgaat gtcagaaccc tgtcttttaa aaaggcagtc actgccttca  
 780  
 ggtggtgctg cccagaaaac ttaaaattta gtcgaggcag tttcaattgt tactgtggac  
 840  
 cgaattagga tcacaataaa tgataatgca ggttcttcaa aaaaaaaaaa a  
 891

<210> 5732

<211> 193

<212> PRT

<213> Homo sapiens

<400> 5732

Pro	Ala	Ala	Ser	Arg	Leu	Arg	Ala	Glu	Ala	Gly	Leu	Gly	Ala	Leu	Pro
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Arg	Arg	Ala	Leu	Ala	Gln	Tyr	Leu	Leu	Phe	Leu	Arg	Leu	Tyr	Pro	Val
		20					25					30			
Leu	Thr	Lys	Ala	Ala	Thr	Ser	Gly	Ile	Leu	Ser	Ala	Leu	Gly	Asn	Phe
	35					40					45				
Leu	Ala	Gln	Met	Ile	Glu	Lys	Lys	Arg	Lys	Lys	Glu	Asn	Ser	Arg	Ser
	50				55					60					
Leu	Asp	Val	Gly	Gly	Pro	Leu	Arg	Tyr	Ala	Val	Tyr	Gly	Phe	Phe	Phe
65				70				75						80	
Thr	Gly	Pro	Leu	Ser	His	Phe	Phe	Tyr	Phe	Phe	Met	Glu	His	Trp	Ile
			85					90					95		
Pro	Pro	Glu	Val	Pro	Leu	Ala	Gly	Leu	Arg	Arg	Leu	Leu	Leu	Asp	Arg
		100					105					110			
Leu	Val	Phe	Ala	Pro	Ala	Phe	Leu	Met	Leu	Phe	Phe	Leu	Ile	Met	Asn
	115					120					125				
Phe	Leu	Glu	Gly	Lys	Asp	Ala	Ser	Ala	Phe	Ala	Ala	Lys	Met	Arg	Gly
	130				135					140					
Gly	Phe	Trp	Pro	Ala	Leu	Arg	Met	Asn	Trp	Arg	Val	Trp	Thr	Pro	Leu
145				150				155						160	
Gln	Phe	Ile	Asn	Ile	Asn	Tyr	Val	Pro	Leu	Lys	Phe	Arg	Val	Leu	Phe
			165				170						175		
Ala	Asn	Leu	Ala	Ala	Leu	Phe	Trp	Tyr	Ala	Tyr	Leu	Ala	Ser	Leu	Gly
		180					185					190			

Lys

<210> 5733

<211> 950

<212> DNA

<213> Homo sapiens

<400> 5733

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<210> 5734

<211> 82

<212> PRT

<213> Homo sapiens

<400> 5734

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Ile	Ser	Phe	Thr	Gly	Ala	Leu	Lys	Ile	Pro	Gly	Val	Ile	Glu	Phe	Ser
			20					25				30			
Leu	Cys	Leu	Leu	Phe	Ala	Lys	Leu	Val	Ser	Tyr	Thr	Phe	Leu	Phe	Trp
		35					40				45				
Leu	Pro	Leu	Tyr	Ile	Thr	Asn	Val	Asp	His	Leu	Asp	Ala	Lys	Lys	Ala
	50				55					60					
Gly	Cys	Thr	Gly	Ser	Pro	Asp	Pro	Leu	Arg	His	Ser	Ser	His	Arg	Thr
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Ser	Lys														

<210> 5735

<211> 4241

<212> DNA

<213> Homo sapiens

<400> 5735

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<210> 5736

<211> 327

<212> PRT

<213> Homo sapiens

<400> 5736

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			20				25						30		
Thr	Val	Arg	Gly	Glu	Arg	Ser	Tyr	Ser	Trp	Gly	Met	Ala	Val	Asn	Val
		35					40					45			
Tyr	Ser	Thr	Ser	Ile	Thr	Gln	Glu	Thr	Met	Ser	Arg	His	Asp	Ile	Ile
		50				55					60				
Ala	Trp	Val	Asn	Asp	Ile	Val	Ser	Leu	Asn	Tyr	Thr	Lys	Val	Glu	Gln
65					70					75				80	
Leu	Cys	Ser	Gly	Ala	Ala	Tyr	Cys	Gln	Phe	Met	Asp	Met	Leu	Phe	Pro
				85					90				95		
Gly	Cys	Ile	Ser	Leu	Lys	Lys	Val	Lys	Phe	Gln	Ala	Lys	Leu	Glu	His

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      100      105      110
Glu Tyr Ile His Asn Phe Lys Leu Leu Gln Ala Ser Phe Lys Arg Met
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Asn Val Asp Lys Val Ile Pro Val Glu Lys Leu Val Lys Gly Arg Phe
      130      135      140
Gln Asp Asn Leu Asp Phe Ile Gln Trp Phe Lys Lys Phe Tyr Asp Ala
      145      150      155      160
Asn Tyr Asp Gly Lys Glu Tyr Asp Pro Val Glu Ala Arg Gln Gly Gln
      165      170      175
Asp Ala Ile Pro Pro Pro Asp Pro Gly Glu Gln Ile Phe Asn Leu Pro
      180      185      190
Lys Lys Ser His His Ala Asn Ser Pro Thr Ala Gly Ala Ala Lys Ser
      195      200      205
Ser Pro Ala Ala Lys Pro Gly Ser Thr Pro Ser Arg Pro Ser Ser Ala
      210      215      220
Lys Arg Ala Ser Ser Ser Gly Ser Ala Ser Lys Ser Asp Lys Asp Leu
      225      230      235      240
Glu Thr Gln Val Ile Gln Leu Asn Glu Gln Val His Ser Leu Lys Leu
      245      250      255
Ala Leu Glu Gly Val Glu Lys Glu Arg Asp Phe Tyr Phe Gly Lys Leu
      260      265      270
Arg Glu Ile Glu Leu Leu Cys Gln Glu His Gly Gln Glu Asn Asp Asp
      275      280      285
Leu Val Gln Arg Leu Met Asp Ile Leu Tyr Ala Ser Glu Glu His Glu
      290      295      300
Gly His Thr Glu Glu Pro Glu Ala Glu Glu Gln Ala His Glu Gln Gln
      305      310      315      320
Pro Pro Gln Gln Glu Glu Tyr
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&lt;210&gt; 5737

&lt;211&gt; 340

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5737

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340

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&lt;210&gt; 5738

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens



&lt;400&gt; 5738

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Met Leu Pro Pro Trp Pro Ile Ser Ser His Gln Val Arg Met Ala Leu
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Gln His Leu Pro Leu Arg Leu Gln Leu Pro Ser Gln Val His Gln Glu
          20             25             30
Thr Thr Gly His His Trp Gln Trp Arg Gly Asp Met Glu His Gly Leu
      35             40             45
Gly Ser Arg Leu Leu Ala Pro Asp Val Gln Pro Gln Thr Pro Pro Val
      50             55             60
Met Gly Glu Val Trp Arg Pro Val Gln Leu Ser Gln Gly His Ala His
65             70             75             80
Leu Ser Leu Gly Ser Val Gly Lys Ala Tyr Pro Lys Ser His Ile Gln
          85             90             95
Gly Gly Xaa

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&lt;210&gt; 5739

&lt;211&gt; 780

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5739

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780

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&lt;210&gt; 5740

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5740

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Ser Lys Pro Cys Gln Ala Leu Gln Leu Leu Ser Thr Leu Pro Ser Gly
      20           25           30
Leu Pro Val Cys Gly Gly Gln Lys Arg Lys Thr Thr Gln Gly Glu Cys
      35           40           45
Leu Leu Pro Pro Ala Gly Lys Gln Leu Gly His His Leu Ser Glu Ser
      50           55           60
Arg Cys Cys Ser Ser Trp Gln Gln Ser His Ser Glu Arg Ser Cys Val
      65           70           75           80
His Cys Leu Ser Gly Arg Pro Cys Gln Ser Pro Ser Leu Pro Pro Pro
      85           90           95
Tyr Leu Cys Arg Lys Pro Gly His His His Phe Lys Ala Leu Pro Ser
      100          105          110
Phe Leu Gly Arg Ala Gln Pro Gln
      115          120

```

&lt;210&gt; 5741

&lt;211&gt; 2444

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5741

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&lt;210&gt; 5742

&lt;211&gt; 427

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5742

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 20 25 30  
 Gly Ala Gly Tyr Asn Ser Glu Asp Glu Tyr Glu Ala Ala Ala Ala Arg  
 35 40 45  
 Ile Glu Ala Met Asp Pro Ala Thr Val Glu Gln Gln Glu His Trp Phe  
 50 55 60  
 Glu Lys Ala Leu Arg Asp Lys Lys Gly Phe Ile Ile Lys Gln Met Lys  
 65 70 75 80  
 Glu Asp Gly Ala Cys Leu Phe Arg Ala Val Ala Asp Gln Val Tyr Gly  
 85 90 95  
 Asp Gln Asp Met His Glu Val Val Arg Lys His Cys Met Asp Tyr Leu  
 100 105 110  
 Met Lys Asn Ala Asp Tyr Phe Ser Asn Tyr Val Thr Glu Asp Phe Thr  
 115 120 125  
 Thr Tyr Ile Asn Arg Lys Arg Lys Asn Asn Cys His Gly Asn His Ile  
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 Glu Met Gln Ala Met Ala Glu Met Tyr Asn Arg Pro Val Glu Val Tyr  
 145 150 155 160  
 Gln Tyr Ser Thr Glu Pro Ile Asn Thr Phe His Gly Ile His Gln Asn  
 165 170 175  
 Glu Asp Glu Pro Ile Arg Val Ser Tyr His Arg Asn Ile His Tyr Asn  
 180 185 190  
 Ser Val Val Asn Pro Asn Lys Ala Thr Ile Gly Val Gly Leu Gly Leu  
 195 200 205  
 Pro Ser Phe Lys Pro Gly Phe Ala Glu Gln Ser Leu Met Lys Asn Ala  
 210 215 220  
 Ile Lys Thr Ser Glu Glu Ser Trp Ile Glu Gln Gln Met Leu Glu Asp  
 225 230 235 240  
 Lys Lys Arg Ala Thr Asp Trp Glu Ala Thr Asn Glu Ala Ile Glu Glu  
 245 250 255  
 Gln Val Ala Arg Glu Ser Tyr Leu Gln Trp Leu Arg Asp Gln Glu Lys  
 260 265 270  
 Gln Ala Arg Gln Val Arg Gly Pro Ser Gln Pro Arg Lys Ala Ser Ala  
 275 280 285  
 Thr Cys Ser Ser Ala Thr Ala Ala Ala Ser Ser Gly Leu Glu Glu Trp  
 290 295 300  
 Thr Ser Arg Ser Pro Arg Gln Arg Ser Ser Ala Ser Ser Pro Glu His  
 305 310 315 320  
 Pro Glu Leu His Ala Glu Leu Gly Met Lys Pro Pro Ser Pro Gly Thr  
 325 330 335  
 Val Leu Ala Leu Ala Lys Pro Pro Ser Pro Cys Ala Pro Gly Thr Ser  
 340 345 350  
 Ser Gln Phe Ser Ala Gly Ala Asp Arg Ala Thr Ser Pro Leu Val Ser  
 355 360 365  
 Leu Tyr Pro Ala Leu Glu Cys Arg Ala Leu Ile Gln Gln Met Ser Pro  
 370 375 380  
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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5745

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849

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&lt;210&gt; 5746

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5746

```

Met Thr Ser Pro Pro Asp Leu Pro Arg Val Leu Val Ser Leu Ser
1          5          10          15
Ala Gly Gly Pro Leu Cys Val Phe Val Gln Phe Cys Cys Met Gly Phe
20          25          30
Val Thr Gln Lys Leu Met Leu Arg Lys Ala Ser Leu Gly Pro Leu Pro
35          40          45
Arg Ala Ser Glu Arg Pro Gly Val Pro Val Phe Leu Glu Met Gly Pro
50          55          60
Ser Ala Ala Gly Cys Glu Ala Leu Arg Ser Ile Thr Gly Arg Ala Trp
65          70          75          80
Arg Trp Trp Pro Pro Gly Thr Thr Leu Ser Cys Leu Phe Thr Phe His
85          90          95
Tyr Gln Val Phe Ser Gly His Tyr Asp Leu Phe Pro Tyr Asn Ser Asp

```

	100		105		110
Leu	Cys	Ile	Leu	Leu	Trp
			Pro	Ala	Val
			Ser	Ala	Gly
			Gly	Gly	Ser
			Gln	Arg	
	115		120		125
Gly	Thr	Gly	Arg	Ala	Ser
			Pro	Cys	Arg
			Thr	Ala	Glu
	130		135		140

&lt;210&gt; 5747

&lt;211&gt; 1999

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5747

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 1980  
 aaaaaaaaaa aaaaaaaaaa  
 1999

<210> 5748  
 <211> 492  
 <212> PRT  
 <213> Homo sapiens

<400> 5748  
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 20 25 30  
 Glu Asp Glu Glu Gly Ala Glu Thr Arg Gly Ala Gly Asp Pro Ala  
 35 40 45  
 Arg Tyr Leu Ser Pro Gly Trp Gly Ser Ala Ser Glu Glu Glu Pro Ser  
 50 55 60  
 Arg Gly His Ser Gly Thr Thr Ala Ser Gly Gly Glu Asn Glu Arg Glu  
 65 70 75 80  
 Asp Leu Glu Gln Glu Trp Lys Pro Pro Asp Glu Glu Leu Ile Lys Lys  
 85 90 95  
 Leu Val Asp Gln Ile Glu Phe Tyr Phe Ser Asp Glu Asn Leu Glu Lys  
 100 105 110  
 Asp Ala Phe Leu Leu Lys His Val Arg Arg Asn Lys Leu Gly Tyr Val  
 115 120 125  
 Ser Val Lys Leu Leu Thr Ser Phe Lys Lys Val Lys His Leu Thr Arg  
 130 135 140  
 Asp Trp Arg Thr Thr Ala His Ala Leu Lys Tyr Ser Val Val Leu Glu  
 145 150 155 160  
 Leu Asn Glu Asp His Arg Lys Val Arg Arg Thr Thr Pro Val Pro Leu



```

      165      170      175
Phe Pro Asn Glu Asn Leu Pro Ser Lys Met Leu Leu Val Tyr Asp Leu
      180      185      190
Tyr Leu Ser Pro Lys Leu Trp Ala Leu Ala Thr Pro Gln Lys Asn Gly
      195      200      205
Arg Val Gln Glu Lys Val Met Glu His Leu Leu Lys Leu Phe Gly Thr
      210      215      220
Phe Gly Val Ile Ser Ser Val Arg Ile Leu Lys Pro Gly Arg Glu Leu
      225      230      235      240
Pro Pro Asp Ile Arg Arg Ile Ser Ser Arg Tyr Ser Gln Val Gly Thr
      245      250      255
Gln Glu Cys Ala Ile Val Glu Phe Glu Glu Val Glu Ala Ala Ile Lys
      260      265      270
Ala His Glu Phe Met Ile Thr Glu Ser Gln Gly Lys Glu Asn Met Lys
      275      280      285
Ala Val Leu Ile Gly Met Lys Pro Pro Lys Lys Lys Pro Ala Lys Asp
      290      295      300
Lys Asn His Asp Glu Glu Pro Thr Ala Ser Ile His Leu Asn Lys Ser
      305      310      315      320
Leu Asn Lys Arg Val Glu Glu Leu Gln Tyr Met Gly Asp Glu Ser Ser
      325      330      335
Ala Asn Ser Ser Ser Asp Pro Glu Ser Asn Pro Thr Ser Pro Met Ala
      340      345      350
Gly Arg Arg His Ala Ala Thr Asn Lys Leu Ser Pro Ser Gly His Gln
      355      360      365
Asn Leu Phe Leu Ser Pro Asn Ala Ser Pro Cys Thr Ser Pro Trp Ser
      370      375      380
Ser Pro Leu Ala Gln Arg Lys Gly Val Ser Arg Lys Ser Pro Leu Ala
      385      390      395      400
Glu Glu Gly Arg Leu Asn Cys Ser Thr Ser Pro Glu Ile Phe Arg Lys
      405      410      415
Cys Met Asp Tyr Ser Ser Asp Ser Ser Val Thr Pro Ser Gly Ser Pro
      420      425      430
Trp Val Arg Arg Arg Arg Gln Ala Glu Met Gly Thr Gln Glu Lys Ser
      435      440      445
Pro Gly Thr Ser Pro Leu Leu Ser Arg Lys Met Gln Thr Ala Asp Gly
      450      455      460
Leu Pro Val Gly Val Leu Arg Leu Pro Arg Gly Pro Asp Asn Thr Arg
      465      470      475      480
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      485      490

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&lt;210&gt; 5749

&lt;211&gt; 2849

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5749

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120

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180

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 2849

&lt;210&gt; 5750

&lt;211&gt; 522

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5750

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 20 25 30  
 Val Gly Pro Gly Ala Ser Gly Val Cys Pro Thr Ala Cys Ile Cys Ala  
 35 40 45  
 Thr Asp Ile Val Ser Cys Thr Asn Lys Asn Leu Ser Lys Val Pro Gly  
 50 55 60  
 Asn Leu Phe Arg Leu Ile Lys Arg Leu Asp Leu Ser Tyr Asn Arg Ile  
 65 70 75 80  
 Gly Leu Leu Asp Ser Glu Trp Ile Pro Val Ser Phe Ala Lys Leu Asn

4910

515

520

&lt;210&gt; 5751

&lt;211&gt; 926

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5751

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926

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&lt;210&gt; 5752

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5752

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20           25           30
Leu Glu Ile Arg Ser Val His Val Gly Val Val Val Ile Lys Ala Val
35           40           45
Ser Ser Gly Phe Tyr Val Ala Met Asn Arg Arg Gly Arg Leu Tyr Gly

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	85	90
Pro Met Phe Leu Ala Leu Asp Arg Arg Gly Gly Pro Arg Pro Gly Gly		95
	100	105
Arg Thr Arg Arg Tyr His Leu Ser Ala His Phe Leu Pro Val Leu Val		110
	115	120
		125
Ser		

&lt;210&gt; 5753

&lt;211&gt; 5668

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5753

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&lt;210&gt; 5754

&lt;211&gt; 221

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5754

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Ser Ser Arg Met Arg Lys Leu Pro Gln Gly Arg Pro Val Pro Pro Leu			
	50	55	60
Gly Pro Glu Thr Arg Val Ser Val Val Trp Val Glu Arg Tyr Asp Asp			
65	70	75	80
Ile Glu Asn Phe Pro Leu Ser Glu Leu Met Thr Glu Ile Ser Thr Gly			
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Val Glu Thr Thr Ala Asn Ser Ser Thr Ser Leu Arg Ser Thr Thr Leu			
	100	105	110
Glu Lys Glu Val Pro Val Ile Phe Ile His Pro Leu Asn Thr Gly Leu			
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Ser Leu Phe Gln Glu Val Gly Leu Lys Asn Cys Ser Ser			
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&lt;210&gt; 5755

&lt;211&gt; 1513

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5755

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<210> 5756

<211> 415

<212> PRT

<213> Homo sapiens

<400> 5756

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Glu Leu Ala Glu Glu Tyr Leu Asp Ile Val Arg Glu His Pro Cys Pro		
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Leu Ser Tyr Val Arg Ala His Leu Phe Lys Leu Trp His His Thr Leu		
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260	265	270
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&lt;210&gt; 5757

&lt;211&gt; 2362

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5757

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<211> 440

<212> PRT

<213> Homo sapiens

<400> 5758

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<212> DNA
<213> Homo sapiens
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<211> 273

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<213> Homo sapiens

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<211> 333

<212> PRT

<213> Homo sapiens

<400> 5762

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<212> DNA
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&lt;211&gt; 466

&lt;212&gt; PRT

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&lt;400&gt; 5764

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5765

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3060  
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3120



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 3220

<210> 5766

<211> 873

<212> PRT

<213> Homo sapiens

<400> 5766

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		20						25					30		
Val	Pro	Leu	Ala	Cys	Ala	Trp	Ser	Cys	Arg	Asn	Leu	Ile	Ala	Phe	Thr
		35					40					45			
Met	Asp	Leu	Arg	Ser	Asp	Asp	Gln	Asp	Leu	Thr	Arg	Met	Ile	His	Ile
	50				55					60					
Leu	Asp	Thr	Glu	His	Pro	Trp	Asp	Leu	His	Ser	Ile	Pro	Ser	Glu	His
65				70					75					80	
His	Glu	Ala	Ile	Thr	Cys	Leu	Glu	Trp	Asp	Gln	Ser	Gly	Ser	Arg	Leu
			85					90						95	
Leu	Ser	Ala	Asp	Ala	Asp	Gly	Gln	Ile	Lys	Cys	Trp	Ser	Met	Ala	Asp
		100					105					110			
His	Leu	Ala	Asn	Ser	Trp	Glu	Ser	Ser	Val	Gly	Ser	Leu	Val	Glu	Gly
		115				120						125			
Asp	Pro	Ile	Val	Ala	Leu	Ser	Trp	Leu	His	Asn	Gly	Val	Lys	Leu	Ala
		130				135					140				
Leu	His	Val	Glu	Lys	Ser	Gly	Ala	Ser	Ser	Phe	Gly	Glu	Lys	Phe	Ser
145				150					155					160	
Arg	Val	Lys	Phe	Ser	Pro	Ser	Leu	Thr	Leu	Phe	Gly	Gly	Lys	Pro	Met
			165					170						175	
Glu	Gly	Trp	Ile	Ala	Val	Thr	Val	Ser	Gly	Leu	Val	Thr	Val	Ser	Leu
		180					185					190			
Leu	Lys	Pro	Ser	Gly	Gln	Val	Leu	Thr	Ser	Thr	Glu	Ser	Leu	Cys	Arg
	195					200					205				
Leu	Arg	Gly	Arg	Val	Ala	Leu	Ala	Asp	Ile	Ala	Phe	Thr	Gly	Gly	Gly
	210				215						220				
Asn	Ile	Val	Val	Ala	Thr	Ala	Asp	Gly	Ser	Ser	Ala	Ser	Pro	Val	Gln
225				230					235					240	
Phe	Tyr	Lys	Val	Cys	Val	Ser	Val	Val	Ser	Glu	Lys	Cys	Arg	Ile	Asp
			245					250						255	
Thr	Glu	Ile	Leu	Pro	Ser	Leu	Phe	Met	Arg	Cys	Thr	Thr	Asp	Leu	Asn
		260					265						270		
Arg	Lys	Asp	Lys	Phe	Pro	Ala	Ile	Thr	His	Leu	Lys	Phe	Leu	Ala	Arg
		275				280						285			
Asp	Met	Ser	Glu	Gln	Val	Leu	Leu	Cys	Ala	Ser	Ser	Gln	Thr	Ser	Ser
	290				295						300				
Ile	Val	Glu	Cys	Trp	Ser	Leu	Arg	Lys	Glu	Gly	Leu	Pro	Val	Asn	Asn
305				310					315					320	
Ile	Phe	Gln	Gln	Ile	Ser	Pro	Val	Val	Gly	Asp	Lys	Gln	Pro	Thr	Ile
			325					330					335		
Leu	Lys	Trp	Arg	Ile	Leu	Ser	Ala	Thr	Asn	Asp	Leu	Asp	Arg	Val	Ser

4932

770                      775                      780  
 Gly Arg Ala Pro Thr Leu Pro Gly Ser Ala Ala Thr Leu Gln Leu Asp  
 785                      790                      795                      800  
 Gly Leu Ala Arg Ala Pro Gly Gln Pro Lys Ile Asp His Leu Arg Arg  
                     805                      810                      815  
 Leu His Leu Gly Ala Cys Pro Thr Glu Glu Cys Lys Ala Cys Thr Arg  
                     820                      825                      830  
 Cys Gly Cys Val Thr Met Leu Lys Ser Pro Asn Arg Thr Thr Ala Val  
                     835                      840                      845  
 Lys Gln Trp Glu Gln Arg Trp Ile Lys Asn Cys Leu Cys Gly Gly Leu  
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 Trp Trp Arg Val Pro Leu Ser Tyr Pro  
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&lt;210&gt; 5767

&lt;211&gt; 1910

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5767

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 gccaggagag accctgaggg ctgcctcacc acagcaggaa cgccttctc agtcccagcc  
 240  
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 360  
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 420  
 acaacctcat tgctatggaa caaaaaagac tgtgaggaaa aagaatcata acttggaata  
 480  
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 540  
 ctagaaaaga ctgtgaaaat atatatctca aaagagaaca aggcatagtc agaaggctca  
 600  
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 660  
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 720  
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 780  
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 960  
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 1020

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 1140  
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 1200  
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 1320  
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 1740  
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 1800  
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 1860  
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 1910

&lt;210&gt; 5768

&lt;211&gt; 360

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5768

Met Asn Tyr Thr Glu Ser Ser Pro Leu Arg Glu Ser Thr Ala Ile Gly  
 1 5 10 15  
 Phe Thr Pro Glu Leu Glu Ser Ile Ile Pro Val Pro Ser Asn Lys Thr  
 20 25 30  
 Thr Cys Glu Asn Trp Arg Glu Ile His His Leu Val Phe His Val Ala  
 35 40 45  
 Asn Ile Cys Phe Ala Val Gly Leu Val Ile Pro Thr Thr Leu His Leu  
 50 55 60  
 His Met Ile Phe Leu Arg Gly Met Leu Thr Leu Gly Cys Thr Leu Tyr  
 65 70 75 80  
 Ile Val Trp Ala Thr Leu Tyr Arg Cys Ala Leu Asp Ile Met Ile Trp  
 85 90 95  
 Asn Ser Val Phe Leu Gly Val Asn Ile Leu His Leu Ser Tyr Leu Leu  
 100 105 110  
 Tyr Lys Lys Arg Pro Val Lys Ile Glu Lys Glu Leu Ser Gly Met Tyr  
 115 120 125  
 Arg Arg Leu Phe Glu Pro Leu Arg Val Pro Pro Asp Leu Phe Arg Arg

130		135		140
Leu Thr Gly Gln Phe Cys Met Ile Gln Thr Leu Lys Lys Gly Gln Thr				
145		150		155
Tyr Ala Ala Glu Asp Lys Thr Ser Val Asp Asp Arg Leu Ser Ile Leu				160
	165		170	175
Leu Lys Gly Lys Met Lys Val Ser Tyr Arg Gly His Phe Leu His Asn				
	180		185	190
Ile Tyr Pro Cys Ala Phe Ile Asp Ser Pro Glu Phe Arg Ser Thr Gln				
	195		200	205
Met His Lys Gly Glu Lys Phe Gln Val Thr Ile Ile Ala Asp Asp Asn				
	210		215	220
Cys Arg Phe Leu Cys Trp Ser Arg Glu Arg Leu Thr Tyr Phe Leu Glu				
225		230		235
Ser Glu Pro Phe Leu Tyr Glu Ile Phe Arg Tyr Leu Ile Gly Lys Asp				240
	245		250	255
Ile Thr Asn Lys Leu Tyr Ser Leu Asn Asp Pro Thr Leu Asn Asp Lys				
	260		265	270
Lys Ala Lys Lys Leu Glu His Gln Leu Ser Leu Cys Thr Gln Ile Ser				
	275		280	285
Met Leu Glu Met Arg Asn Ser Ile Ala Ser Ser Ser Asp Ser Asp Asp				
	290		295	300
Gly Leu His Gln Phe Leu Arg Ser Thr Ser Ser Met Ser Ser Leu His				
305		310		315
Val Ser Ser Pro His Gln Arg Ala Ser Ala Lys Met Lys Pro Ile Glu				
	325		330	335
Glu Gly Ala Glu Asp Asp Asp Asp Val Phe Glu Pro Ala Ser Pro Asn				
	340		345	350
Thr Leu Lys Val His Gln Leu Pro				
	355		360	

&lt;210&gt; 5769

&lt;211&gt; 427

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5769

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120

ctgcagacac agctgaagga agtattaaga gaaaatgatc tcttgcgga ggatgtggaa

180

gtaaaggaga gcaaattgag ttcttcaatg aatagcatca agatcttctg gggccagag

240

ctgaagaagg aacgagccct gagaaaggat gaagcttcca aaatcccat ttggaaggaa

300

cagtacagag ttgtacaaga ggaaaaccag gtaagttcta cgtgtgttta cctttattgg

360

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420

cacgcgt

427

&lt;210&gt; 5770

<211> 85  
 <212> PRT  
 <213> Homo sapiens

<400> 5770  
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 20 25 30  
 Ile Lys Ile Phe Trp Gly Pro Glu Leu Lys Lys Glu Arg Ala Leu Arg  
 35 40 45  
 Lys Asp Glu Ala Ser Lys Ile Pro Ile Trp Lys Glu Gln Tyr Arg Val  
 50 55 60  
 Val Gln Glu Glu Asn Gln Val Ser Ser Thr Cys Val Tyr Leu Tyr Trp  
 65 70 75 80  
 Leu Asn Ser Cys Ile  
 85

<210> 5771  
 <211> 2539  
 <212> DNA  
 <213> Homo sapiens

<400> 5771  
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 120  
 gtcagatgtg ccaccccgcc acaactggcc aatgggggtga cggaaggcct ggactatggc  
 180  
 ttcatgaagg aagtaacatt ccaactgtcat gggctacatc ttgcacggtg ctccaaaact  
 240  
 cacctgtcag tcagaggcaa ctgggatgca gagattcctc tctgtaaacc agtcaactgt  
 300  
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 360  
 catatacagt atcagtgtt tcttggttat aagctccatg gaaattcatc aagaagggtc  
 420  
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 480  
 ccagtaattg aatatggaac tgtcaatggg acagattttg actgtggaaa ggcagcccg  
 540  
 attcagtgt tcaaaggctt caagctccta ggactttctg aaatcacctg tgaagccgat  
 600  
 ggccagtga gctctgggtt ccccaactgt gaacacactt cttgtggttc tcttccaatg  
 660  
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 720  
 tgcaggtctg gatatgtcat acaaggcagt tcagatctga tttgtacaga gaaaggggta  
 780  
 tggaaccagc cttatccagt ctgtgagccc ttgtcctgtg ggtccccacc gtctgtcgcc  
 840  
 aatgcagtgg caactggaga ggcacacacc tatgaaagtg aagtgaaact cagatgtctg  
 900

gaaggttata cgatggatac agatacagat acaatcacct gtcagaaaga tggtcgctgg  
960  
ttccctgaga gaatctcctg cagtcctaaa aaatgtcctc tcccggaaaa cataacacat  
1020  
atacttgtag atggggacga tttcagtgtg aataggcaag tttctgtgtc atgtgcagaa  
1080  
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1140  
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1320  
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1380  
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1440  
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1680  
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1740  
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1800  
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1860  
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1980  
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2520

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2539

<210> 5772

<211> 642

<212> PRT

<213> Homo sapiens

<400> 5772

Tyr	Thr	Cys	Asn	Glu	Gly	Phe	Leu	Leu	Glu	Gly	Ala	Arg	Ser	Arg	Val
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Cys	Leu	Ala	Asn	Gly	Ser	Trp	Ser	Gly	Ala	Thr	Pro	Asp	Cys	Val	Pro
			20					25					30		
Val	Arg	Cys	Ala	Thr	Pro	Pro	Gln	Leu	Ala	Asn	Gly	Val	Thr	Glu	Gly
			35				40					45			
Leu	Asp	Tyr	Gly	Phe	Met	Lys	Glu	Val	Thr	Phe	His	Cys	His	Gly	Leu
	50					55					60				
His	Leu	Ala	Arg	Cys	Ser	Lys	Thr	His	Leu	Ser	Val	Arg	Gly	Asn	Trp
65					70					75				80	
Asp	Ala	Glu	Ile	Pro	Leu	Cys	Lys	Pro	Val	Asn	Cys	Gly	Pro	Pro	Glu
				85					90					95	
Asp	Leu	Ala	His	Gly	Phe	Pro	Asn	Gly	Phe	Ser	Phe	Ile	His	Gly	Gly
			100					105					110		
His	Ile	Gln	Tyr	Gln	Cys	Phe	Pro	Gly	Tyr	Lys	Leu	His	Gly	Asn	Ser
			115				120					125			
Ser	Arg	Arg	Cys	Leu	Ser	Asn	Gly	Ser	Trp	Ser	Gly	Ser	Ser	Pro	Ser
	130					135					140				
Cys	Leu	Pro	Cys	Arg	Cys	Ser	Thr	Pro	Val	Ile	Glu	Tyr	Gly	Thr	Val
145					150					155					160
Asn	Gly	Thr	Asp	Phe	Asp	Cys	Gly	Lys	Ala	Ala	Arg	Ile	Gln	Cys	Phe
				165					170					175	
Lys	Gly	Phe	Lys	Leu	Leu	Gly	Leu	Ser	Glu	Ile	Thr	Cys	Glu	Ala	Asp
			180					185					190		
Gly	Gln	Trp	Ser	Ser	Gly	Phe	Pro	His	Cys	Glu	His	Thr	Ser	Cys	Gly
			195				200					205			
Ser	Leu	Pro	Met	Ile	Pro	Asn	Ala	Phe	Ile	Ser	Glu	Thr	Ser	Ser	Trp
	210					215						220			
Lys	Glu	Asn	Val	Ile	Thr	Ser	Cys	Arg	Ser	Gly	Tyr	Val	Ile	Gln	
225					230				235					240	
Gly	Ser	Ser	Asp	Leu	Ile	Cys	Thr	Glu	Lys	Gly	Val	Trp	Asn	Gln	Pro
				245					250					255	
Tyr	Pro	Val	Cys	Glu	Pro	Leu	Ser	Cys	Gly	Ser	Pro	Pro	Ser	Val	Ala
			260					265					270		
Asn	Ala	Val	Ala	Thr	Gly	Glu	Ala	His	Thr	Tyr	Glu	Ser	Glu	Val	Lys
		275					280					285			
Leu	Arg	Cys	Leu	Glu	Gly	Tyr	Thr	Met	Asp	Thr	Asp	Thr	Asp	Thr	Ile
	290					295					300				
Thr	Cys	Gln	Lys	Asp	Gly	Arg	Trp	Phe	Pro	Glu	Arg	Ile	Ser	Cys	Ser
305					310					315				320	
Pro	Lys	Lys	Cys	Pro	Leu	Pro	Glu	Asn	Ile	Thr	His	Ile	Leu	Val	His
				325					330					335	
Gly	Asp	Asp	Phe	Ser	Val	Asn	Arg	Gln	Val	Ser	Val	Ser	Cys	Ala	Glu
			340					345					350		
Gly	Tyr	Thr	Phe	Glu	Gly	Val	Asn	Ile	Ser	Val	Cys	Gln	Leu	Asp	Gly



355	360	365
Thr Trp Glu Pro Pro Phe Ser	Asp Glu Ser Cys Ser	Pro Val Ser Cys
370	375	380
Gly Lys Pro Glu Ser Pro Glu	His Gly Phe Val Val	Gly Ser Lys Tyr
385	390	395
Thr Phe Glu Ser Thr Ile Ile	Tyr Gln Cys Glu Pro	Gly Tyr Glu Leu
405	410	415
Glu Gly Asn Arg Glu Arg Val	Cys Gln Glu Asn Arg	Gln Trp Ser Gly
420	425	430
Gly Val Ala Ile Cys Lys Glu	Thr Arg Cys Glu Thr	Pro Leu Glu Phe
435	440	445
Leu Asn Gly Lys Ala Asp Ile	Glu Asn Arg Thr Thr	Gly Pro Asn Val
450	455	460
Val Tyr Ser Cys Asn Arg Gly	Tyr Ser Leu Glu Gly	Pro Ser Glu Ala
465	470	475
His Cys Thr Glu Asn Gly Thr	Trp Ser His Pro Val	Pro Leu Cys Lys
485	490	495
Pro Asn Pro Cys Pro Val Pro	Phe Val Ile Pro Glu	Asn Ala Leu Leu
500	505	510
Ser Glu Lys Glu Phe Tyr Val	Asp Gln Asn Val Ser	Ile Lys Cys Arg
515	520	525
Glu Gly Phe Leu Leu Gln Gly	His Gly Ile Ile Thr	Cys Asn Pro Asp
530	535	540
Glu Thr Trp Thr Gln Thr Ser	Ala Lys Cys Glu Lys	Ile Ser Cys Gly
545	550	555
Pro Pro Ala His Val Glu Asn	Ala Ile Ala Arg Gly	Val His Tyr Gln
565	570	575
Tyr Gly Asp Met Ile Thr Tyr	Ser Cys Tyr Ser Gly	Tyr Met Leu Glu
580	585	590
Gly Phe Leu Arg Ser Val Cys	Leu Glu Asn Gly Thr	Trp Thr Ser Pro
595	600	605
Pro Ile Cys Arg Ala Val Cys	Arg Phe Pro Cys Gln	Asn Gly Gly His
610	615	620
Leu Pro Thr Pro Lys Cys Leu	Phe Leu Ser Arg Gly	Leu Asp Gly Ala
625	630	635
Pro Leu		640

&lt;210&gt; 5773

&lt;211&gt; 579

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5773

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 120  
 agccggtccc ggtcgcatc ccgggacaag gagcgcgtgc ggaagcgttc caaatctcgg  
 180  
 gaaagtaaac ggaaccggcg gcgggagtcg cggtcccggt cgcgctccac caacacggcc  
 240  
 gtgtcccggc gcgagcggga ccgggagcgc cctcgtcccc gcccgaccgc atcgacatct  
 300

tcgggcgac ggtgagcaag cgcagcagcc tggacgagaa gcagaagcga gaggaggagg  
 360  
 agaagaaagc ggagtctgag cggcagcgaa aaattcgaca gcaagaaata gaagaaaaac  
 420  
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 480  
 gaactggaga aaaggaagga tgaattgaa cgagaagttc tccgaagggt ggaggaagcc  
 540  
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 579

<210> 5774

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5774

Xaa	Arg	Val	Arg	Gly	Leu	Arg	Arg	Ala	Val	Arg	Ala	Ser	Pro	Gly	Arg
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Met	Gly	Arg	Ser	Arg	Ser	Arg	Ser	Ser	Ser	Arg	Ser	Lys	His	Thr	Lys
			20					25					30		
Ser	Ser	Lys	His	Asn	Lys	Lys	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg
		35					40					45			
Asp	Lys	Glu	Arg	Val	Arg	Lys	Arg	Ser	Lys	Ser	Arg	Glu	Ser	Lys	Arg
	50					55					60				
Asn	Arg	Arg	Arg	Glu	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Thr	Asn	Thr	Ala
65				70					75					80	
Val	Ser	Arg	Arg	Glu	Arg	Asp	Arg	Glu	Arg	Pro	Arg	Pro	Arg	Pro	Thr
			85					90						95	
Ala	Ser	Thr	Ser	Ser	Gly	Ala	Arg								
			100												

<210> 5775

<211> 1441

<212> DNA

<213> Homo sapiens

<400> 5775

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 120  
 caccggggac acctggaacc cagcaccacg agcctcagct tcacctccat gggcatcaac  
 180  
 atgcctaagg tgctctccca gccgtccgac ctggatctcc aagacgtaga ggaagtggag  
 240  
 atcggcagag acaccttctg gcccgactcc gagcccaagc cggagcaggc tccacgtctc  
 300  
 cctggctctc agggccctga cgagggggcg ggcggggcgc tgcgcacctc cgtgaggagc  
 360  
 cttccccgca gggcccgggtg cagcgccggc ttcgggcctg aatccagcgc ggagcggccg  
 420  
 gcggggccagc cgcttggggc cgctcccttg gccagccgc ggggcgcctg gcgcgtgacg  
 480

ctctgtgcagc aagcagcggc cgggcccagag ggtgcgcccg agcgggctgc cgagctggga  
 540  
 gtcaacttcg gtcggagccg gcagggcagc gcgcggggga ccaagccgca caggtgcgag  
 600  
 gcctgctggca agagtttcaa gtataactcg ctgctcctga agcaccagcg catccacacg  
 660  
 ggcgagaagc cctacgcctg ccacgagtgc ggcaagtgtt tcgccgcagc ttcgcgcttc  
 720  
 atccagcacc agcgcattca cagcggcgag aagccctacg cctgccccga gtgcagcaag  
 780  
 accttcacgc gcagctccaa cctcatcaag caccaggtca tccacagcgg cgagcggccc  
 840  
 ttcgcctgcg gcgactgcgg caaactgttc cgccgcagct tcgcgctcct ggagcacgcg  
 900  
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 960  
 cgctcgact tcttccggca caaccgcaca cacacgggcg agaagcccta cactgcctc  
 1020  
 gactgcggca agagcttcag ccacagctcg cacctcatca agcaccagcg caccacacgt  
 1080  
 ggcggtgcggc cctacgcctg ccggttgtgt ggcaagagct tcagccggcg ctccaacctg  
 1140  
 caccggcacg agaagatcca caccaccggg cccaaggccc tggccatgct gatgctggg  
 1200  
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 1260  
 ggggggagcgg ggcgcccagg gccactggaa cagccccact ggagtcaagg ctccgagggg  
 1320  
 ggagagaggg gctcgggaag ggagctgggg cggtgagggc atgggggtgag gcatggcgat  
 1380  
 ggggggagggc gagggcgaga aagggcaggc actctgcgaa ttaaaggcct tggacttgaa  
 1440  
 a  
 1441

&lt;210&gt; 5776

&lt;211&gt; 359

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5776

Met	Gly	Ile	Asn	Met	Pro	Lys	Val	Leu	Ser	Gln	Pro	Ser	Asp	Leu	Asp
1				5				10						15	
Leu	Gln	Asp	Val	Glu	Glu	Val	Glu	Ile	Gly	Arg	Asp	Thr	Phe	Trp	Pro
		20					25						30		
Asp	Ser	Glu	Pro	Lys	Pro	Glu	Gln	Ala	Pro	Arg	Ser	Pro	Gly	Ser	Gln
		35				40						45			
Ala	Pro	Asp	Glu	Gly	Ala	Gly	Gly	Ala	Leu	Arg	Thr	Ser	Val	Arg	Ser
	50					55				60					
Leu	Pro	Arg	Arg	Ala	Arg	Cys	Ser	Ala	Gly	Phe	Gly	Pro	Glu	Ser	Ser
65				70					75					80	
Ala	Glu	Arg	Pro	Ala	Gly	Gln	Pro	Pro	Gly	Ala	Val	Pro	Cys	Ala	Gln
			85					90						95	
Pro	Arg	Gly	Ala	Trp	Arg	Val	Thr	Leu	Val	Gln	Gln	Ala	Ala	Ala	Gly

100	105	110
Pro Glu Gly Ala	Pro Glu Arg Ala Ala Glu Leu Gly Val Asn Phe Gly	
115	120	125
Arg Ser Arg Gln Gly Ser Ala Arg Gly Thr Lys Pro His Arg Cys Glu		
130	135	140
Ala Cys Gly Lys Ser Phe Lys Tyr Asn Ser Leu Leu Leu Lys His Gln		
145	150	155
Arg Ile His Thr Gly Glu Lys Pro Tyr Ala Cys His Glu Cys Gly Lys		
165	170	175
Cys Phe Ala Ala Ser Arg Phe Ile Gln His Gln Arg Ile His Ser		
180	185	190
Gly Glu Lys Pro Tyr Ala Cys Pro Glu Cys Ser Lys Thr Phe Thr Arg		
195	200	205
Ser Ser Asn Leu Ile Lys His Gln Val Ile His Ser Gly Glu Arg Pro		
210	215	220
Phe Ala Cys Gly Asp Cys Gly Lys Leu Phe Arg Arg Ser Phe Ala Leu		
225	230	235
Leu Glu His Ala Arg Val His Ser Gly Glu Lys Pro Tyr Glu Cys Ser		
245	250	255
Asp Cys Gly Lys Cys Phe Arg Gly Arg Ser His Phe Phe Arg His Asn		
260	265	270
Arg Thr His Thr Gly Glu Lys Pro Tyr His Cys Leu Asp Cys Gly Lys		
275	280	285
Ser Phe Ser His Ser Ser His Leu Ile Lys His Gln Arg Thr His Arg		
290	295	300
Gly Val Arg Pro Tyr Ala Cys Pro Leu Cys Gly Lys Ser Phe Ser Arg		
305	310	315
Arg Ser Asn Leu His Arg His Glu Lys Ile His Thr Thr Gly Pro Lys		
325	330	335
Ala Leu Ala Met Leu Met Leu Gly Ala Ala Ala Ala Gly Ala Leu Ala		
340	345	350
Thr Pro Pro Pro Ala Pro Thr		
355		

&lt;210&gt; 5777

&lt;211&gt; 1431

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5777

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 gggagcgctt tctcccggga accgcggctg tgaccaagt ggcccggacc agtttggggc  
 120  
 tgcgtgcggc ctgcctcaag caaccaggta cgtaggtcgg cggcccagct cggcgtgcg  
 180  
 gtgggagccg gagggcgaca gtcagagccg ggggtgccagc gggacgcgac cgccagatcc  
 240  
 acttaggacc cgtcggttct gcgaagcggc cacgtctgag tcccggggcc tctcgtgt  
 300  
 gcagatgtcg ccttaggacc tcggccagga taccctctgc catgctcttg tgetgcccgt  
 360  
 gatcaccgac tggcccttgt aagcaccttc gcagcaggaa gccagagct gcgcctgccc  
 420

tttctgaagg ctgtggaaga ggttgagtg ggcgcattctt agcttgcccc atccccattt  
 480  
 gaggtctgtc ggagctgccc ttcagtgtga gcatccacaa tgggtacccc agcctcggtg  
 540  
 gtcagtgagc caccoccttg gcaggccccg attgaggccc ggggccgcaa gcaggcctcg  
 600  
 gccaacatct tccaggagcg cgagctgctg cagatccaag ccctgtttca acgcagcggg  
 660  
 gaccagctgg ccgaggaacg ggcacagatc atctgggaat gtgcagggga ccaccgtgtg  
 720  
 gctgaggccc tcaagaggct gcgcaggaag agggccccc aa ggagaaacc ccctgggcca  
 780  
 ctgctacac cactgcagcc gcctcagaat cctggagccc cactctgcac tggccaaccc  
 840  
 acagagtgcc acagagacag cctccagtga gcagtatctg cactctagga agaaaagtgc  
 900  
 caggatccgc cggaactgga ggaagtcagg cccacaagc tacctccacc agatcagaca  
 960  
 ctgatccagg gaaagagcca ggaatggcag tgtcttcctt cttgccccaa ggccctgggga  
 1020  
 ggtgaaggaa gagagacttt aggcaagcag cccaaagggg taaatgaaag caagaggctg  
 1080  
 ctgccactga cctgctccat tcagaacaag actggatgct tctgttgagc tctccattat  
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 1200  
 ccagtctaac actattcctg ggctgcatga tattcccctg ggagcaaagt gacaggcact  
 1260  
 tagatgcagc atttcaccac tcatgtact aatcatctac ctgctactac tgtaaaccat  
 1320  
 ggttccagca gcctgttcca cccccccaca ccacaggat agcacaggga aactgtagtt  
 1380  
 taagtggcaa ataaaaacat ttgcatcaaa aaaaaaaaaa aaaaaaaaaa a  
 1431

&lt;210&gt; 5778

&lt;211&gt; 164

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5778

Met	Leu	Thr	Leu	Lys	Gly	Ser	Ser	Asp	Arg	Pro	Gln	Met	Gly	Met	Gly
1				5				10					15		
Gln	Ala	Lys	Met	Arg	Pro	Leu	Gln	Pro	Leu	Pro	Gln	Pro	Ser	Glu	Arg
			20					25					30		
Ala	Gly	Ala	Ala	Leu	Gly	Phe	Leu	Leu	Arg	Arg	Cys	Leu	Gln	Gly	Pro
			35				40					45			
Val	Gly	Asp	His	Gly	Gln	His	Lys	Ser	Met	Ala	Glu	Gly	Ile	Leu	Ala
		50				55					60				
Glu	Val	Leu	Arg	Arg	His	Leu	Gln	His	Glu	Glu	Ala	Pro	Gly	Leu	Arg
65					70				75					80	
Arg	Gly	Arg	Phe	Ala	Glu	Arg	Arg	Gly	Pro	Lys	Trp	Ile	Trp	Arg	Ser
				85				90						95	
Arg	Pro	Ala	Gly	Thr	Pro	Ala	Leu	Thr	Val	Ala	Leu	Arg	Leu	Pro	Pro

			100					105					110				
Gln	Arg	Arg	Ala	Gly	Pro	Pro	Thr	Tyr	Val	Pro	Gly	Cys	Leu	Arg	Gln		
			115					120					125				
Ala	Ala	Arg	Ser	Pro	Lys	Leu	Val	Arg	Ala	Thr	Trp	Val	Thr	Ala	Ala		
			130					135					140				
Val	Pro	Gly	Arg	Lys	Arg	Ser	Leu	Ala	Pro	Glu	Gln	Pro	Ile	Leu	Gly		
145						150					155				160		
Pro	Ser	Gln	Val														

&lt;210&gt; 5779

&lt;211&gt; 371

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5779

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cgggagagag ggggtgatttc agccttgtct ggcattccctt gtgtctgcnt gaggggtgtgt  
120  
gcacacggga atgtgtgagg gtgtgtgtgc gtgcattgcag ctgtgtgtgg atgtgcantc  
180  
gtgtgtgggt gtgtagggtgt gtgtgggtgt gtgcaccagt gcagggtgtgc atgggtgtgt  
240  
acagggtgggt gtgtgtatgt gtgtgggggt gtgcccatct gtgcagggtgt gtgggtgtgc  
300  
agggtcnat gcctgtgtgt ggggtgtgncc ccgtgtgtac ccctgtggag gtgtgtgggt  
360  
gtgtgcagt t  
371

&lt;210&gt; 5780

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5780

Leu	Leu	Arg	Arg	Val	Glu	Gly	Arg	Lys	Gly	Arg	Thr	His	Asp	Leu	Pro		
1				5					10					15			
Gln	Arg	His	Gly	Arg	Glu	Arg	Gly	Val	Ile	Ser	Ala	Leu	Ser	Gly	Ile		
			20					25					30				
Pro	Cys	Val	Cys	Xaa	Arg	Val	Cys	Ala	His	Gly	Asn	Val	Cys	Gly	Cys		
			35				40					45					
Val	Cys	Val	His	Ala	Ala	Val	Cys	Gly	Cys	Ala	Xaa	Val	Cys	Gly	Cys		
			50				55				60						
Val	Gly	Val	Cys	Gly	Cys	Val	His	Gln	Cys	Arg	Cys	Ala	Trp	Val	Cys		
65					70				75						80		
Thr	Gly	Gly	Cys	Val	Tyr	Val	Cys	Gly	Gly	Val	Pro	Ile	Cys	Ala	Gly		
			85				90						95				
Val	Trp	Val	Cys	Arg	Val	Xaa	Cys	Leu	Cys	Val	Gly	Val	Xaa	Pro	Cys		
			100				105						110				
Val	Pro	Leu	Trp	Arg	Cys	Val	Gly	Val	Cys	Ser							
			115				120										

&lt;210&gt; 5781

&lt;211&gt; 845

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5781

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60
ggcgctggcg tgcggtgtca tttctgcggt gtaaagtctc ccaccttggc cgatttcaag
120
ccaccaggtg aggatggcac tgcaacatct tccactgagg ctccagctgc cctctcaggt
180
acatcagggc ctggancgtc ctctcctcca ggagggccag gactcggccc cctgccagcc
240
cccgaagcat tgcagccagg agtgcagcgt gggggccctg caggccatgg ccaggcccca
300
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360
tgcagctcag gaaaccaccg gtcatcactg gcagtggcgt ggagacatgg aacatggata
420
gggcagccgc ctcttgccc ctgatgttca gccacagact cctcccgta tgggcgaggt
480
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540
caggacaggt gttcatgttg tccagagtc attccagaa ctctctgtgc ttggccagcc
600
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660
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720
gaggctggag tggctgctat accactgttc acctgtggga tgaataaaca gtggagaatg
780
aggcaccaac caactcccaa gccaggtaaa cagatccaca gttcccttca ttcggtgtgt
840
ctctg
845

```

&lt;210&gt; 5782

&lt;211&gt; 147

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5782

```

Gly Val Pro Cys Pro Lys Ile Glu Gly Ala Val Gly Leu Gly Ser Gly
1      5      10     15
Ser Arg Pro Arg Gly Ala Gly Val Arg Cys His Phe Cys Gly Val Asn
20     25     30
Ala Pro Thr Leu Ala Asp Phe Lys Pro Pro Gly Glu Asp Gly Thr Ala
35     40     45
Thr Ser Ser Thr Glu Ala Pro Ala Ala Leu Ser Gly Thr Ser Gly Pro
50     55     60
Gly Xaa Ser Ser Pro Pro Gly Gly Pro Gly Leu Gly Pro Leu Pro Ala
65     70     75     80
Pro Glu Ala Leu Gln Pro Gly Val Gln Arg Gly Gly Pro Ala Gly His

```

	85		90		95										
Gly	Gln	Ala	Pro	Ala	Pro	Pro	Ala	Pro	Gly	Gln	Ala	Gly	Ser	His	Arg
	100				105				110						
Pro	Gly	Ala	Ala	Pro	Ser	Pro	Arg	Cys	Ser	Ser	Gly	Asn	His	Arg	Ser
	115				120				125						
Ser	Leu	Ala	Val	Ala	Trp	Arg	His	Gly	Thr	Trp	Ile	Gly	Gln	Pro	Pro
	130				135				140						
Pro	Cys	Pro													
145															

&lt;210&gt; 5783

&lt;211&gt; 1839

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5783

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60
ctggtgatcc agcagcgcg ggtgcgaatc tacgatggcg aggagaagat aaaatttgat
120
gctgggactc tccttcttag tacacaccga ctgatttga gagatcagaa aaatcatgag
180
tggtgcatgg ccattctcct ttcccaaatt gtgttcattg aagaacaggc ggctggaatt
240
gggaagagtg caaaatagt ggttcattct caccagctc ctctaacaa agaacctggc
300
ccattccaga gtagtaagaa ctctacatc aaactctcct tcaaagaaca tggccagatt
360
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480
gtaggtattg aaaggaaact ggaagaaaaa agaaaagaaa ctgacaaaaa ctttctgag
540
gcctttgaag acctcagcaa actaatgatc aaggctaagg aaatggtgga attatcaaaa
600
tcaattgcta ataaaattaa agacaaacaa ggtgacatca cagaagatga gaccatcagg
660
tttaaatcct acttgctgag catgggaata gctaaccag ttaccagaga aacctacggc
720
tcaggcacac agtaccacat gcagctggcc aaacaactgg ctggaatatt gcaggtgcct
780
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840
cgaggaatgg aattgctctc accagaagat ttagtgaatg cgtgcaagat gctggaagca
900
ctgaaattac ctctcaggct ccgtgtgttt gacagtggcg tcatggtaat tgagcttcag
960
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1020
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1080
ttgctgcttg cagagaagat gggccatctt tgccgtgatg actcagtgga aggcctgcgt
1140

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 1200  
 ccatatgctt gcgtcatgta gaggttgat gacattgagc taagagataa accccgatca  
 1260  
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 1320  
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 1620  
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 1680  
 aaaaatgaaa taattttatt tgacacatta tttatatata ttctatctag gtttctcttt  
 1740  
 gtttttttta aagtgatgat ttcattggact gggcatttaa aagaaatggc aactgtggtc  
 1800  
 catttttggc ttttccaaat gctgtggaat ttttggaat  
 1839

&lt;210&gt; 5784

&lt;211&gt; 386

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5784

Met	Asp	Arg	Phe	Val	Trp	Thr	Ser	Gly	Leu	Leu	Glu	Ile	Asn	Glu	Thr
1				5					10					15	
Leu	Val	Ile	Gln	Gln	Arg	Gly	Val	Arg	Ile	Tyr	Asp	Gly	Glu	Glu	Lys
		20					25						30		
Ile	Lys	Phe	Asp	Ala	Gly	Thr	Leu	Leu	Leu	Ser	Thr	His	Arg	Leu	Ile
		35				40						45			
Trp	Arg	Asp	Gln	Lys	Asn	His	Glu	Cys	Cys	Met	Ala	Ile	Leu	Leu	Ser
	50					55					60				
Gln	Ile	Val	Phe	Ile	Glu	Glu	Gln	Ala	Ala	Gly	Ile	Gly	Lys	Ser	Ala
65				70					75					80	
Lys	Ile	Val	Val	His	Leu	His	Pro	Ala	Pro	Pro	Asn	Lys	Glu	Pro	Gly
				85					90					95	
Pro	Phe	Gln	Ser	Ser	Lys	Asn	Ser	Tyr	Ile	Lys	Leu	Ser	Phe	Lys	Glu
			100					105					110		
His	Gly	Gln	Ile	Glu	Phe	Tyr	Arg	Arg	Leu	Ser	Glu	Glu	Met	Thr	Gln
		115					120					125			
Arg	Arg	Trp	Glu	Asn	Met	Pro	Val	Ser	Gln	Ser	Leu	Gln	Thr	Asn	Arg
		130					135					140			
Gly	Pro	Gln	Pro	Gly	Arg	Ile	Arg	Ala	Val	Gly	Ile	Val	Gly	Ile	Glu
145				150						155				160	
Arg	Lys	Leu	Glu	Glu	Lys	Arg	Lys	Glu	Thr	Asp	Lys	Asn	Ile	Ser	Glu
				165					170					175	
Ala	Phe	Glu	Asp	Leu	Ser	Lys	Leu	Met	Ile	Lys	Ala	Lys	Glu	Met	Val

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<210> 5785
<211> 785
<212> DNA
<213> Homo sapiens
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4948

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 720  
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 780  
 cgcgc  
 785

<210> 5786

<211> 159

<212> PRT

<213> Homo sapiens

<400> 5786

Met	Tyr	Thr	Ile	Ile	Asn	Gly	Pro	Ser	Lys	Leu	Val	Ala	Gln	Pro	His
1				5					10					15	
Arg	Ser	His	Ala	Ala	Ala	Gly	Glu	Gly	Pro	Ala	Pro	Gly	Ala	Pro	Glu
			20					25					30		
Lys	Pro	Ala	Ala	Arg	Ala	Ala	Asp	Leu	Ala	Ala	Pro	Ala	Gly	Ala	Ala
		35					40						45		
Leu	Ala	Gln	Pro	Leu	Gly	Pro	Trp	Pro	Leu	Ser	Ser	Ala	Gly	Pro	Arg
		50				55					60				
Leu	Val	Phe	Asn	Arg	Val	Asn	Arg	Arg	Arg	Asp	Pro	Ser	Lys	Ser	Pro
65				70						75					80
Ser	Leu	Gln	Gly	Thr	Gln	Glu	Thr	Tyr	Thr	Leu	Ala	His	Lys	Glu	Asn
				85					90					95	
Val	Arg	Phe	Val	Ser	Glu	Ala	Trp	Gln	Gln	Val	Gln	Gln	Gln	Leu	Asp
			100					105					110		
Gly	Gly	Pro	Ala	Gly	Glu	Gly	Gly	Pro	Arg	Pro	Val	Gln	Tyr	Val	Glu
		115					120					125			
Arg	Thr	Pro	Asn	Pro	Arg	Leu	Gln	Asn	Phe	Val	Pro	Ile	Asp	Leu	Asp
		130				135					140				
Glu	Trp	Trp	Ala	Gln	Gln	Phe	Leu	Ala	Arg	Ile	Thr	Ser	Cys	Ser	
145					150					155					

<210> 5787

<211> 1683

<212> DNA

<213> Homo sapiens

<400> 5787

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&lt;210&gt; 5788

&lt;211&gt; 417

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5788

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Leu Arg Pro Glu Lys His Thr Lys Glu Gln Ile Leu Glu Phe Leu Val			
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Arg Gly His His Pro Lys Ser Gly Glu Glu Ala Val Thr Val Leu Glu			
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Glu Ser Phe Arg Gln Met Val Val Ile His Lys Glu Ile Pro Thr Gly			
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Lys Lys Asp His Glu Cys Ser Glu Cys Gly Lys Thr Phe Ile Tyr Asn			
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<211> 1201  
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&lt;400&gt; 5790

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 Trp Glu Asp Lys Gly Ser Phe Thr Phe Gln Ala Ala Leu His His Asp  
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&lt;210&gt; 5791

&lt;211&gt; 3285

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5791

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<211> 479

<212> PRT

<213> Homo sapiens

<400> 5792

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Glu	Trp	Thr	Glu	Ala	Ile	Gln	Ala	Val	Ala	Asp	Arg	Leu	Gln	Arg	Gln
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<212> DNA
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<210> 5794

<211> 209

<212> PRT

<213> Homo sapiens

<400> 5794

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Lys	Val	Tyr	Asp	Ser	Leu	Ala	Leu	Pro	Gln	Asp	Leu	Gln	Ala	Ala	
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Arg	Ala	Leu	Val	Ile	Ile	Ser	Ile	Ile	Val	Ala	Ala	Leu	Gly	Val	Leu
			85						90					95	
Leu	Ser	Val	Val	Gly	Gly	Lys	Cys	Thr	Asn	Cys	Leu	Glu	Asp	Glu	Ser
		100						105					110		
Ala	Lys	Ala	Lys	Thr	Met	Ile	Val	Ala	Gly	Val	Val	Phe	Leu	Leu	Ala
	115					120						125			
Gly	Leu	Met	Val	Ile	Val	Pro	Val	Ser	Trp	Thr	Ala	His	Asn	Ile	Ile
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Gln	Asp	Phe	Tyr	Asn	Pro	Leu	Val	Ala	Ser	Gly	Gln	Lys	Arg	Glu	Met
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			165					170					175		
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Val															

<210> 5795

<211> 993

<212> DNA

<213> Homo sapiens

<400> 5795

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<210> 5796

<211> 200

<212> PRT

<213> Homo sapiens

<400> 5796

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			20					25					30		
Tyr	Leu	Arg	Lys	Glu	Met	Thr	Gln	Asn	Ile	Tyr	Gln	Met	Ala	Thr	Phe
			35				40					45			
Gly	Thr	Thr	Ala	Gly	Phe	Ser	Gly	Ile	Phe	Ser	Asn	Phe	Leu	Phe	Arg
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Ala	Thr	Leu	Pro	Phe	Leu	Ser	Thr	Val	Val	Thr	Asp	Lys	Leu	Phe	Val
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Pro Leu Pro Pro Lys Gly Arg Val Leu Ile His Trp Met Thr Leu Cys
145      150      155      160
Gln Thr Gln Met Lys Leu Met Ala Ile Pro Leu Val Phe Gln Ile Met
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Leu Glu Lys Thr Ile His Glu Glu
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&lt;210&gt; 5797

&lt;211&gt; 405

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5797

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&lt;210&gt; 5798

&lt;211&gt; 109

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5798

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Arg Arg Val Glu Gly Ser Arg Asp Gln Ala Trp Pro Leu Gln Thr Phe
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Ser Gln Arg Asn Tyr Arg Ser Leu Ser Leu Tyr Cys Trp Leu Ala Arg
50      55      60
Glu Gly Arg Thr Ser Ser Tyr Gln Gly Asn Gln Gly Ser Leu Arg Pro
65      70      75      80
Arg Pro Glu Pro Arg Gly Pro Glu Gly Ser Lys Arg Ser Gly Arg Pro
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&lt;210&gt; 5799

&lt;211&gt; 4261

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5799

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&lt;210&gt; 5800

&lt;211&gt; 535

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5800

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Ile	Val	Gly	Asn	Ile	Ile	Gly	Ser	Gly	Ile	Phe	Val	Ser	Pro	Lys	Gly
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Ser	Val	Ala	Leu	Ser	Thr	Phe	Gly	Gly	Val	Asn	Gly	Ser	Leu	Phe	Thr
			325						330					335	
Ser	Ser	Arg	Leu	Phe	Phe	Ala	Gly	Ala	Arg	Glu	Gly	His	Leu	Pro	Ser
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	485	490
Glu Val Glu Arg Gly Ser Gly Thr Glu Glu Ala Asn Glu Asp Met Glu		495
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Val Ala Gly Gln Pro Gln Pro		525
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&lt;210&gt; 5801

&lt;211&gt; 2418

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5801

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2418

&lt;210&gt; 5802

&lt;211&gt; 350

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5802

Asp Pro Thr Ser Asp Asp Val Met Asp Ser Phe Leu Glu Lys Phe Gln

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      20           25           30
Phe Glu Lys Val Pro Leu Phe Met Ser Arg Ala Pro Ser Glu Ile Asp
      35           40           45
Pro Arg Glu Asn Pro Asp Leu Ala Cys Leu Gln Ser Ile Ile Phe Asp
      50           55           60
Glu Glu Arg Ser Pro Glu Glu Gln Ala Lys Thr Tyr Lys Asp Glu Gly
65           70           75           80
Asn Asp Tyr Phe Lys Glu Lys Asp Tyr Lys Lys Ala Val Ile Ser Tyr
      85           90           95
Thr Glu Gly Leu Lys Lys Lys Cys Ala Asp Pro Asp Leu Asn Ala Val
      100          105          110
Leu Tyr Thr Asn Arg Ala Ala Ala Gln Tyr Tyr Leu Gly Asn Phe Arg
      115          120          125
Ser Ala Leu Asn Asp Val Thr Ala Ala Arg Lys Leu Lys Pro Cys His
      130          135          140
Leu Lys Ala Ile Ile Arg Gly Ala Leu Cys His Leu Glu Leu Lys His
145          150          155          160
Phe Ala Glu Ala Val Asn Trp Cys Asp Glu Gly Leu Gln Ile Asp Ala
      165          170          175
Lys Glu Lys Lys Leu Leu Glu Met Arg Ala Lys Ala Asp Lys Leu Lys
      180          185          190
Arg Ile Glu Gln Arg Asp Val Arg Lys Ala Asn Leu Lys Glu Lys Lys
      195          200          205
Glu Arg Asn Gln Asn Glu Ala Leu Leu Gln Ala Ile Lys Ala Arg Asn
      210          215          220
Ile Arg Leu Ser Glu Ala Ala Cys Glu Asp Glu Asp Ser Ala Ser Glu
225          230          235          240
Gly Leu Gly Glu Leu Phe Leu Asp Gly Leu Ser Thr Glu Asn Pro His
      245          250          255
Gly Ala Arg Leu Ser Leu Asp Gly Gln Gly Arg Leu Ser Trp Pro Val
      260          265          270
Leu Phe Leu Tyr Pro Glu Tyr Ala Gln Ser Asp Phe Ile Ser Ala Phe
      275          280          285
His Glu Asp Ser Arg Phe Ile Asp His Leu Met Val Met Phe Gly Glu
      290          295          300
Thr Pro Ser Trp Asp Leu Glu Gln Lys Tyr Cys Leu Ile Ile Trp Arg
305          310          315          320
Ser Thr Leu Arg Met Arg Thr Gly Gln Asn Tyr Thr Gly Cys Leu Pro
      325          330          335
Arg Ala Pro Cys Tyr Arg Phe Tyr Ser Thr Arg Gly Thr Leu
      340          345          350

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&lt;210&gt; 5803

&lt;211&gt; 692

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5803

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120

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&lt;210&gt; 5804

&lt;211&gt; 126

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5804

Met	Ala	Pro	Gly	Glu	Val	Thr	Ile	Thr	Val	Arg	Leu	Ile	Arg	Ser	Phe
1				5					10					15	
Glu	His	Arg	Asn	Phe	Lys	Pro	Val	Val	Tyr	His	Gly	Val	Asn	Leu	Asp
			20					25				30			
Gln	Thr	Val	Lys	Glu	Phe	Ile	Val	Phe	Leu	Lys	Gln	Asp	Val	Pro	Leu
		35					40					45			
Arg	Thr	Asn	Leu	Pro	Pro	Pro	Phe	Arg	Asn	Tyr	Lys	Tyr	Asp	Ala	Leu
		50				55					60				
Lys	Ile	Ile	His	Gln	Ala	His	Lys	Ser	Lys	Thr	Asn	Glu	Leu	Val	Leu
65				70					75					80	
Ser	Leu	Glu	Asp	Asp	Glu	Arg	Leu	Leu	Leu	Lys	Glu	Asp	Ser	Thr	Leu
			85					90					95		
Lys	Ala	Ala	Gly	Ile	Ala	Ser	Glu	Thr	Glu	Ile	Ala	Phe	Phe	Cys	Glu
			100					105					110		
Glu	Asp	Tyr	Arg	Asn	Tyr	Lys	Ala	Asn	Pro	Ile	Ser	Ser	Trp		
			115					120					125		

&lt;210&gt; 5805

&lt;211&gt; 1112

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5805

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240  
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1112

&lt;210&gt; 5806

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5806

Met	Ser	Ile	Tyr	Phe	Pro	Ile	His	Cys	Pro	Asp	Tyr	Leu	Arg	Ser	Ala
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Lys	Met	Thr	Glu	Val	Met	Met	Asn	Thr	Gln	Pro	Met	Glu	Glu	Ile	Gly
			20					25					30		
Leu	Ser	Pro	Arg	Lys	Asp	Gly	Leu	Ser	Tyr	Gln	Ile	Phe	Pro	Asp	Pro
		35				40						45			
Ser	Asp	Phe	Asp	Arg	Cys	Cys	Lys	Leu	Lys	Asp	Arg	Leu	Pro	Ser	Ile
	50					55				60					
Val	Val	Glu	Pro	Thr	Glu	Gly	Glu	Val	Glu	Ser	Gly	Glu	Leu	Arg	Trp
65					70				75				80		
Pro	Pro	Glu	Glu	Phe	Leu	Val	Gln	Glu	Asp	Glu	Gln	Asp	Asn	Cys	Glu
				85				90					95		
Glu	Thr	Ala	Lys	Glu	Asn	Lys	Glu	Gln							



100

105

&lt;210&gt; 5807

&lt;211&gt; 1429

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5807

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420  
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<210> 5808

<211> 261

<212> PRT

<213> Homo sapiens

<400> 5808

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		20					25					30			
Leu	Leu	Gly	Gly	Ile	Pro	Glu	Ser	Gly	Gly	Pro	Asp	Ala	Arg	Gln	Gly
	35					40					45				
Trp	Leu	Ala	Ala	Leu	Gln	Asp	Arg	Ser	Ile	Leu	Ala	Pro	Leu	Ala	Trp
	50				55					60					
Asp	Leu	Gly	Leu	Leu	Leu	Phe	Val	Gly	Gln	His	Ser	Leu	Met	Ala	
65				70					75				80		
Ala	Glu	Arg	Val	Lys	Ala	Trp	Thr	Ser	Arg	Tyr	Phe	Gly	Val	Leu	Gln
			85					90					95		
Arg	Ser	Leu	Tyr	Val	Ala	Cys	Thr	Ala	Leu	Ala	Leu	Gln	Leu	Val	Met
		100					105					110			
Arg	Tyr	Trp	Glu	Pro	Ile	Pro	Lys	Gly	Pro	Val	Leu	Trp	Glu	Ala	Arg
	115					120						125			
Ala	Glu	Pro	Trp	Ala	Thr	Trp	Val	Pro	Leu	Leu	Cys	Phe	Val	Leu	His
	130				135						140				
Val	Ile	Ser	Trp	Leu	Leu	Ile	Phe	Ser	Ile	Leu	Leu	Val	Phe	Asp	Tyr
145				150					155					160	
Ala	Glu	Leu	Met	Gly	Leu	Lys	Gln	Val	Tyr	Tyr	His	Val	Leu	Gly	Leu
			165					170						175	
Gly	Glu	Pro	Leu	Ala	Leu	Lys	Ser	Pro	Arg	Ala	Leu	Arg	Leu	Phe	Ser
		180					185					190			
His	Leu	Arg	His	Pro	Val	Cys	Val	Glu	Leu	Leu	Thr	Val	Leu	Trp	Val
	195					200						205			
Val	Pro	Thr	Leu	Gly	Thr	Asp	Arg	Leu	Leu	Leu	Ala	Phe	Leu	Leu	Thr
	210				215						220				
Leu	Tyr	Leu	Gly	Leu	Ala	His	Gly	Leu	Asp	Gln	Gln	Asp	Leu	Arg	Tyr
225				230					235					240	
Leu	Arg	Ala	Gln	Leu	Gln	Arg	Lys	Leu	His	Leu	Leu	Ser	Arg	Pro	Gln
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<210> 5809

<211> 2009

<212> DNA

<213> Homo sapiens

<400> 5809

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 2009

<210> 5810

<211> 52

<212> PRT

<213> Homo sapiens

<400> 5810

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Gly	Gly	Gln	Trp	Arg	Asp	Leu	Gly	Ser	Leu	Gln	Pro	Pro	Pro	Gly
		20					25				30			
Phe	Lys	Gln	Phe	Ser	Cys	Leu	Ser	Leu	Leu	Ser	Ser	Trp	His	Tyr
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His	Pro	Thr	Pro											
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<210> 5811

<211> 1607

<212> DNA

<213> Homo sapiens

<400> 5811

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&lt;210&gt; 5812

&lt;211&gt; 463

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5812

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 20 25 30  
 Thr Pro Gln Ala Ile Glu Pro Gln Ala Ile Val Gln Gln Val Pro Ala  
 35 40 45  
 Pro Ser Arg Met Gln Met Pro Gln Gly Asn Pro Leu Leu Leu Ser His  
 50 55 60  
 Thr Leu Gln Glu Leu Leu Ala Arg Asp Thr Val Gln Val Glu Leu Ile  
 65 70 75 80  
 Pro Glu Lys Lys Gly Leu Phe Leu Lys His Val Glu Tyr Glu Val Ser  
 85 90 95  
 Ser Gln Arg Phe Lys Ser Ser Val Tyr Arg Arg Tyr Asn Asp Phe Val  
 100 105 110  
 Val. Phe Gln Glu Met Leu Leu His Lys Phe Pro Tyr Arg Met Val Pro

115 120 125  
 Ala Leu Pro Pro Lys Arg Met Leu Gly Ala Asp Arg Glu Phe Ile Glu  
 130 135 140  
 Ala Arg Arg Arg Ala Leu Lys Arg Phe Val Asn Leu Val Ala Arg His  
 145 150 155 160  
 Pro Leu Phe Ser Glu Asp Val Val Leu Lys Leu Phe Leu Ser Phe Ser  
 165 170 175  
 Gly Ser Asp Val Gln Asn Lys Leu Lys Glu Ser Ala Gln Cys Val Gly  
 180 185 190  
 Asp Glu Phe Leu Asn Cys Lys Leu Ala Thr Arg Ala Lys Asp Phe Leu  
 195 200 205  
 Pro Ala Asp Ile Gln Ala Gln Phe Ala Ile Ser Arg Glu Leu Ile Arg  
 210 215 220  
 Asn Ile Tyr Asn Ser Phe His Lys Leu Arg Asp Arg Ala Glu Arg Ile  
 225 230 235 240  
 Ala Ser Arg Ala Ile Asp Asn Ala Ala Asp Leu Leu Ile Phe Gly Lys  
 245 250 255  
 Glu Leu Ser Ala Ile Gly Ser Asp Thr Thr Pro Leu Pro Ser Trp Ala  
 260 265 270  
 Ala Leu Asn Ser Ser Thr Trp Gly Ser Leu Lys Gln Ala Leu Lys Gly  
 275 280 285  
 Leu Ser Val Glu Phe Ala Leu Leu Ala Asp Lys Ala Ala Gln Gln Gly  
 290 295 300  
 Lys Gln Glu Glu Asn Asp Val Val Glu Lys Leu Asn Leu Phe Leu Asp  
 305 310 315 320  
 Leu Leu Gln Ser Tyr Lys Asp Leu Cys Glu Arg His Glu Lys Gly Val  
 325 330 335  
 Leu His Lys His Gln Arg Ala Leu His Lys Tyr Ser Leu Met Lys Arg  
 340 345 350  
 Gln Met Met Ser Ala Thr Ala Gln Asn Arg Glu Pro Glu Ser Val Glu  
 355 360 365  
 Gln Leu Glu Ser Arg Ile Val Glu Gln Glu Asn Ala Ile Gln Thr Met  
 370 375 380  
 Glu Leu Arg Asn Tyr Phe Ser Leu Tyr Cys Leu His Gln Glu Thr Gln  
 385 390 395 400  
 Leu Ile His Val Tyr Leu Pro Leu Thr Ser His Ile Leu Arg Ala Phe  
 405 410 415  
 Val Asn Ser Gln Ile Gln Gly His Lys Glu Met Ser Lys Val Trp Asn  
 420 425 430  
 Asp Leu Arg Pro Lys Leu Ser Cys Leu Phe Ala Gly Pro His Ser Thr  
 435 440 445  
 Leu Thr Pro Pro Cys Ser Pro Pro Glu Asp Gly Leu Cys Pro His  
 450 455 460

&lt;210&gt; 5813

&lt;211&gt; 2991

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5813

ntgtgatgtat gtaattgatc actttatttaa ctggcaaaaa gaagccttgt tgaggtgata  
 60  
 aaccgaactt cattacatcc tgtatgtcga gagcaaacac attgggacgt ggctgatggg  
 120

ttcccatcttc aaggctgatt ctgatgatga taatgtttaa gtagcattga ttgttctcta  
180  
attgaatttt tctttcttta ggcctcttct gaagagctga aagctgccta ccggaggctc  
240  
tgtatgctct accatccaga caagcacaga gacccagagc tcaagtcaca ggcggaacga  
300  
ctgtttaacc ttgttcacca ggcttatgaa gtgcttagtg acccccaaac cagggccatc  
360  
tatgatatat atgggaagag aggactggaa atggaaggat gggagggtgt ggaaaggagg  
420  
agaaccctcg ctgaaattcg agaggagttt gagcggctgc agagagagag agaagagagg  
480  
agattgcagc agcgaaccaa tcccaagctt tgtgacaaca aactgtgctc tgcagttttc  
540  
atcccggtga atccgacctg gcctgaccac tgtcctagct cggaacctag acaagaacac  
600  
cgtgggctac ctgcagtggc gatggggtat ccagtcagcc atgaacacta gcatcgctcc  
660  
agacactaaa accagccact tcaactgtggc cctgcagctg ggaatccctc actcctttgc  
720  
actgatcagc tatcagcaca aattccaaga tgacgatcag actcgtgtga aaggatccct  
780  
gcagagcagg cttctttggg acggtggtgg agtacggagc tgagaggaag atctccaggc  
840  
acagcgtttt ggggtcagct gtcagcgttg gagttccaca gggcgtttct ctcaaagtca  
900  
agctcaacag ggccagtcag acatacttct tccctattca cttgacggac cagcttctgc  
960  
ccagcgccat gttctatgcc accgtggggc ctctagtggc ctactttgcc atgcaccgtc  
1020  
tgatcatcaa accatacctc agggctcaga aagagaagga attggagaag cagagggaaa  
1080  
gcgcccgcac cgatgtgctg cagaagaagc aagagggcga gtccgctgtc cggtgatgc  
1140  
aggaatctgt ccgaaggata attgaggcag aagagtccag aatgggcctc atcatcgtca  
1200  
atgcctggtg cgggaagttt gtcaatgaca agagcaggaa gagcgagaag gtgaaggtga  
1260  
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1320  
cctccaaggc tgggctgcct ggcttttatg acccgtgtgt gggggaagag aagaacctga  
1380  
aagtgtctta tcagttccgg ggcgtcctgc atcaggtgat ggtgctggac agtgaggccc  
1440  
tccggatacc aaagcagtcc cacaggatcg atacagatgg ataaactgcc aagaaccaga  
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1560  
ccagacatca gatgttttta ttttatatta ttattataga aggtggtacc attatcaatt  
1620  
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1680  
ccccactggg aaccagactg cagcctggcc catggctgtt ttccaagga tcagttcctg  
1740

gaggggaagg ctctggccct gactccgctg tgtcccagac acacgtgctg accgcagccc  
 1800  
 gccgcctctg agttcttggc tgggtctgga ggtgtctgtg gagcaccctg ccctcaccac  
 1860  
 aggagcgtga gccacttctg cagtccacgc tgaacatggg aaacaacctg aaaagcaggc  
 1920  
 aggcctcccc gtcagggagc ctctgctgtg ctggcttccc atgaccacct cctcttgctg  
 1980  
 aaatattact gcttgaatct ggagcagatt gcgggtttat aaaactgctt tttatctgag  
 2040  
 aacaaaaggg tttggaaatt agtcgtcttt tttccccact ccagagctg ctcaagtcac  
 2100  
 tccaccggcc ccctcggett gggacagggt agtgtaactc ccgatcccag ggcctagccc  
 2160  
 tgacacaggt ggcttcccgt atcccgggtg gaaaacgccc tgccaccagc gggcttgagc  
 2220  
 tggcctgtgt ccctccaccg cctgcaccac ccacctccag agtgacgtgc tgggcaaggg  
 2280  
 cagctcaaga ggacaggacc aggcgcttgg caagacatca gacacacca acccaaaggc  
 2340  
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 2400  
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 2460  
 tcctccacgt gccacttgg gatgcagaat gcagcggagc taggaccccc tccacggcct  
 2520  
 ggacctcggc tgcagtaaag ttacgtgagg cctgtctctc ggggcctgga agtggcagcc  
 2580  
 atcagttgct cttgctgacc cctcggagca agcgcgcac aggtggtggc tgagacagct  
 2640  
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 2700  
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 2760  
 gaaaagcagt tcgggttgtc caattctgta acattcatct ccatttttta aaaaggtttc  
 2820  
 tctgacggcc ccacggcccc agccgcgggtg agcgtcgtgt tgcattgagc tgggccccgg  
 2880  
 gcttcccgtg cgcctctgcc gcagggtgctt ctgggcaccc atcctctgcg tttcatttgc  
 2940  
 agtcgactgt acagaaggca ctcaccacaa taaacctttc ctgaaagcag a  
 2991

&lt;210&gt; 5814

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5814

Ala Ser Ser Glu Glu Leu Lys Ala Ala Tyr Arg Arg Leu Cys Met Leu  
 1 5 10 15  
 Tyr His Pro Asp Lys His Arg Asp Pro Glu Leu Lys Ser Gln Ala Glu  
 20 25 30  
 Arg Leu Phe Asn Leu Val His Gln Ala Tyr Glu Val Leu Ser Asp Pro



```

      35      40      45
Gln Thr Arg Ala Ile Tyr Asp Ile Tyr Gly Lys Arg Gly Leu Glu Met
      50      55      60
Glu Gly Trp Glu Val Val Glu Arg Arg Arg Thr Pro Ala Glu Ile Arg
65      70      75      80
Glu Glu Phe Glu Arg Leu Gln Arg Glu Arg Glu Glu Arg Arg Leu Gln
      85      90      95
Gln Arg Thr Asn Pro Lys Leu Cys Asp Asn Lys Leu Cys Ser Ala Val
      100      105      110
Phe Ile Pro Trp Asn Pro Thr Arg Pro Asp His Cys Pro Ser Ser Glu
      115      120      125
Pro Arg Gln Glu His Arg Gly Leu Pro Ala Val Ala Met Gly Tyr Pro
      130      135      140
Val Ser His Glu His
145

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&lt;210&gt; 5815

&lt;211&gt; 590

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5815

```

ttcatccagg ctgctcttgg ggatcagcca cgtgatatcc tttgtggggc agctgatgaa
60
gttctagctg ttctaaagaa tgaaaagctg cgggacaagg aaaggcgaaa ggagattgac
120
ctgctgctgg gtcaaacaga tgataccaga taccatgtgc tagtgaacct gggcctcccc
180
agtctcttta gttttgggct tgtagatgat gccaccatc tcatcaatgc cctccgacag
240
cagagtataa cccttcatct tgttgatgtc atgccggtcc tcatcacgct ttcttcgctt
300
ggctcttctt tctctctgca tctgcggttt ggtccgttga gccttgcttc ccatacgggt
360
gccctccagc ttcccaacaa gggacagcac ctctcctgtg gggtcatccc ggcggggtccg
420
gtcaatgaga gaacggtcag cttggagcac aagattcgag ttgccttgt actcgtattg
480
cagactacgg gcggttacat ccgccatggc cgcggtgct cggaggcttc agaccaccac
540
gcctccatac cgcaagctgc aaacggccgc agatctctgc tctggcgcc
590

```

&lt;210&gt; 5816

&lt;211&gt; 196

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5816

```

Phe Ile Gln Ala Ala Leu Gly Asp Gln Pro Arg Asp Ile Leu Cys Gly
  1           5           10          15
Ala Ala Asp Glu Val Leu Ala Val Leu Lys Asn Glu Lys Leu Arg Asp
      20      25      30
Lys Glu Arg Arg Lys Glu Ile Asp Leu Leu Leu Gly Gln Thr Asp Asp

```

35	40	45
Thr Arg Tyr His Val Leu Val Asn Leu Gly Leu Pro Ser Leu Phe Ser		
50	55	60
Phe Gly Leu Val Asp Asp Ala His His Leu Ile Asn Ala Leu Arg Gln		
65	70	75
Gln Ser Ile Thr Leu His Leu Val Asp Val Met Pro Val Leu Ile Thr		
85	90	95
Leu Ser Ser Leu Gly Ser Ser Phe Leu Leu His Leu Arg Phe Gly Pro		
100	105	110
Leu Ser Leu Val Ser His Thr Gly Ala Leu Gln Leu Pro Asn Lys Gly		
115	120	125
Gln His Leu Ser Cys Gly Phe Ile Pro Ala Gly Pro Val Asn Glu Arg		
130	135	140
Thr Val Ser Leu Glu His Lys Ile Arg Val Arg Leu Val Leu Val Leu		
145	150	155
Gln Thr Thr Gly Gly Tyr Ile Arg His Gly Arg Gly Cys Ser Glu Ala		
165	170	175
Ser Asp His His Ala Ser Ile Pro Gln Ala Ala Asn Gly Arg Arg Ser		
180	185	190
Leu Leu Leu Ala		
195		

&lt;210&gt; 5817

&lt;211&gt; 648

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5817

```

cccaaagatg cagaactaca aagcaagccc caagatggag tgagcaacaa caatgaaatt
60
cagaagaaag ccaccatggg gcagttacag aacaaggaga acaataacac caaggacagc
120
cctagtaggc agtgctcctg ggacaagtct gagtcacccc agagaagcag catgaacaat
180
ggatccccca cagctctatc aggcagcaaa accaacagcc caaagaacag tggtcacaag
240
ctagatgtgt ctagaagccc ccctctcatg gtcaaaaaga acccagcctt taataagggt
300
agtgggatag ttaccaatgg gtccttcagc agcagtaatg cagaagggtc tgagaaaacc
360
caaaccaccc ccaatgggag cctacaggcc agaaggagct cttcactgaa ggtatctggt
420
accaaaatgg gcacgcacag tgtacagaat ggaacggtgc gcatgggcat tttgaacagc
480
gacacactcg ggaacccac aaatgttcga aacatgagct ggctgccaaa tggctatgtg
540
accctgaggg ataacaagca gaaagaacaa gctggagagt taggccagca caacagactg
600
tcacctatga taatgtccat cacagttctc catgatgaac ttgatgac
648

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&lt;210&gt; 5818

&lt;211&gt; 191

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5818

```

Met Gly Gln Leu Gln Asn Lys Glu Asn Asn Asn Thr Lys Asp Ser Pro
 1           5           10           15
Ser Arg Gln Cys Ser Trp Asp Lys Ser Glu Ser Pro Gln Arg Ser Ser
          20           25           30
Met Asn Asn Gly Ser Pro Thr Ala Leu Ser Gly Ser Lys Thr Asn Ser
          35           40           45
Pro Lys Asn Ser Val His Lys Leu Asp Val Ser Arg Ser Pro Pro Leu
          50           55           60
Met Val Lys Lys Asn Pro Ala Phe Asn Lys Gly Ser Gly Ile Val Thr
65           70           75           80
Asn Gly Ser Phe Ser Ser Ser Asn Ala Glu Gly Leu Glu Lys Thr Gln
          85           90           95
Thr Thr Pro Asn Gly Ser Leu Gln Ala Arg Arg Ser Ser Ser Leu Lys
          100          105          110
Val Ser Gly Thr Lys Met Gly Thr His Ser Val Gln Asn Gly Thr Val
          115          120          125
Arg Met Gly Ile Leu Asn Ser Asp Thr Leu Gly Asn Pro Thr Asn Val
          130          135          140
Arg Asn Met Ser Trp Leu Pro Asn Gly Tyr Val Thr Leu Arg Asp Asn
145          150          155          160
Lys Gln Lys Glu Gln Ala Gly Glu Leu Gly Gln His Asn Arg Leu Ser
          165          170          175
Pro Met Ile Met Ser Ile Thr Val Leu His Asp Glu Leu Asp Asp
          180          185          190

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&lt;210&gt; 5819

&lt;211&gt; 1652

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5819

```

gatattcttt tggaaacgta atattggcct tggggctctc cagccctttg ggacttccaa
60
tgggatctta gaagcagccg aagcagcgtg agggcgggccg agggccagcc acgatttgaa
120
cgctctgcct tgcagctctt ctggaccgag gagcccaaag ccctaccctc accattcacc
180
aggtcctgtg ggaagagcag cgtggagggtg ggctgagggtt agaagggtgca gagcgtggaa
240
gaagattgtg agctgagtat tggacatctg ttcttgaata gtccctgggc ctgccatagg
300
aaaggaagtt ctccagggtt acagttctta tccgcgtgaa tacacatggc tctgttacga
360
aaaattaatc aggtgctgct gttccttctg atcgtgaccc tctgtgtgat tctgtataag
420
aaagttcata aggggactgt gccaagaat gacgcagatg atgaatccga gactcctgaa
480
gaactggaag aagagattcc tgtggtgatt tgtgctgcag cagggaggat gggtgccact
540
atggctgcc acaatagcat ctacagcaac cctgacgcca acatcttggt ctatgtagt
600

```

ggactccgga atactctgac tcgaatacga aaatggattg aacattccaa actgagagaa  
 660  
 ataaacttta aaatcgtgga attcaacccg atggtcctca aaggggaagat cagaccagac  
 720  
 tcatcgaggc ctgaattgct ccagcctctg aactttgttc gattttatct ccctctactt  
 780  
 atccaccaac acgagaaagt catctatttg gacgatgatg taattgtaca aggtgatatc  
 840  
 caagaactgt atgacaccac cttggccctg ggccacgcgg cggctttctc agatgactgc  
 900  
 gatttgcctt ctgctcagga cataaacaga ctctgtgggac ttcagaacac atatatgggc  
 960  
 tatctggact accggaagaa ggccatcaag gaccttggca tcagccccag cacctgctct  
 1020  
 ttcaatcctg gtgtgattgt tgccaacatg acagaatgga agcaccagcg catcaccaag  
 1080  
 caattggaga aatggatgca aaagaatgtg gagtacgtga aggtttctct accatttttt  
 1140  
 ccatgcttgg aaacaaaatc attcaattaa ttttccacac atagttcaag ggtagaaat  
 1200  
 atttcacagt catctcaggt cagattttct tacagaggca atgttaagaa agaaaagggg  
 1260  
 gcagtcaatt aaaacctttc ctcaaaagat ataaatcaga ggaatcaaga tcctgtggag  
 1320  
 cgaggagtcc ctgattatac attttcctag taagctgttg aaaaatgtga cttgaatctt  
 1380  
 ttccaccaa caatcttcat ttatcttagt tgagtttccc ctctaacaat agattttttt  
 1440  
 attaaggatt attatataaa gtcaattttg ctttttaagg tttattttta taatttataa  
 1500  
 ttttctgtta tcggagtttt aaaatagaga agataaaaat aagtctaata caagcactat  
 1560  
 tatcccatca ttgtattgcc tagcagtctt gtgtatctgg atattttaat accatcataa  
 1620  
 ccttgaattt gcaagtaaag ttattctaaa ta  
 1652

&lt;210&gt; 5820

&lt;211&gt; 274

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5820

Met	Ala	Leu	Leu	Arg	Lys	Ile	Asn	Gln	Val	Leu	Leu	Phe	Leu	Leu	Ile
1				5					10					15	
Val	Thr	Leu	Cys	Val	Ile	Leu	Tyr	Lys	Lys	Val	His	Lys	Gly	Thr	Val
			20					25					30		
Pro	Lys	Asn	Asp	Ala	Asp	Asp	Glu	Ser	Glu	Thr	Pro	Glu	Glu	Leu	Glu
		35					40					45			
Glu	Glu	Ile	Pro	Val	Val	Ile	Cys	Ala	Ala	Ala	Gly	Arg	Met	Gly	Ala
	50					55					60				
Thr	Met	Ala	Ala	Ile	Asn	Ser	Ile	Tyr	Ser	Asn	Pro	Asp	Ala	Asn	Ile
65					70					75				80	
Leu	Phe	Tyr	Val	Val	Gly	Leu	Arg	Asn	Thr	Leu	Thr	Arg	Ile	Arg	Lys

```

<400> 5821
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cgagaccagc ctggtcaaca tagcgagact tcgtcactag aaaaaattta aaaaattttt
120
taaaaaggaa aaaatataac ttagagcccc ctatgaaaaa ctaaattagc atcatgacag
180
gatacacttt ggggagtgaa atttcacagt acctttattt aattccaagc catagagcct
240
ggtaatatTT ttctctttat cagctgtggc actaaaataa cagtggattt tttccctcta
300
gacattcttc ttttggccga tgaaaaattt gacttcgac tttcattgtc ttcttcgagt
360
gcaaatgaag atgatgaagt cttcttcgga ccctttggac ataaagaaag atgtattgct
420
gccagcttgg aattaaataa tccgggtccc gaacagcctc cgttgcccac atctgagagt
480
ccctttgcct ggagccctct ggccggggag aagttcgtgg aggtgtacaa agaagctcac
540
ttactggctt tacacattga gagcagcagc cggaaccagg cagcccaagc tgccaagcct
600
gaagaccctc ggagccaggg cgtggaaaga ttcatacagg agtcaaaatt aaaaataaac
660

```

ctctttgaga aagaaaagga aatgaagaaa agccccacgt ctcttaaaag ggagacatac  
720  
tacctgtcag acagccccctt gctggggccc cctgtgggtg agcctcggct cttggcctcc  
780  
tccccggccc tgcccagctc tgggtgcccag gcccgccctca cccggggcgcc ggggcctccg  
840  
cactctgctc atgctttgcc cagggaaatca tgcactgctc atgctgcaag tcaggcagcg  
900  
actcagagga agccccggac caaattgctg ctgcctcgag cggcctctgt tagaggaaga  
960  
agcatccctg gggctgcgga gaagcccaag aaagagattc cagctagtcc ttccaggaca  
1020  
aaaatcccag ctgagaagga atcccaccgg gatgttctcc ctgacaaacc tgccccgggt  
1080  
gctgtcaatg tgccggccgc cggaagccac ttggggccagg gcaagcgggc gatccctggt  
1140  
ccaaacaagt tggggctgaa gaagaccctg ttaaaagcac ccggctctac cagcaatctc  
1200  
gcaaggaagt cctcctcggg gcctgtttgg agcggggcat ccagtgcgtg cacatcccca  
1260  
gcagtgggca aagctaaatc aagtgaattt gcaagtattc ctgcaaatac ctccccgcct  
1320  
ctgtcaaaca tcagcaagtc aggcagaatg ggaccgcga tgctgcggcc agctctgcct  
1380  
gcaggccctg tgggggcctc ctccctggcag gccaaagcggg tcgatgtttc tgagctggca  
1440  
gcggagcagc tcacggcacc cccctcagca tccccaccc aaccacagac tccggaaggt  
1500  
ggcgccagc ggctgaactc cagttgcgct tggtcagaat cttctcaatt gaataagact  
1560  
agaagtatca gacggcgaga ttctgtcta aattccaaga caaaggttat gcctactcct  
1620  
acaaatcaat ttaaaattcc taagttttct attggtgact ccccgagacag ctcaacacca  
1680  
aagctttcgc gggcacagcg gccgcagtcg tgcacgtcag ttggcagggc cactgtccac  
1740  
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1800  
gtgtcagcct tgcccacacc cgccagccgg cgtgctctg gccttcacc gatgaccccc  
1860  
aaaacgatgc ccagggccgt gggctctccc ctgtgtgtgc cagctcggag acgttcctct  
1920  
gagccccgca agaactctgc aatgagaact gaaccaacaa gggagagcaa cagaaagaca  
1980  
gattccaggc tgggtgatgt gtcccctgac aggggttctc ctcttccccg tgtgcctcag  
2040  
gcacttaact tttctccaga ggaaagcgat tctactttct ccaaaagtac tgccacagaa  
2100  
gtagctcggg aggaagccaa gccgggtgga gatgcagccc ctagtgaggc tcttcttgta  
2160  
gatatcaaac tggaaccact cgcggtcact ccagatgctg caagccagcc cctcattgac  
2220  
cttcctctca tcgacttctg cgatacccca gaagcacacg tggctgtagg atctgaaagc  
2280

aggcctctga tcgacctcat gacaaacact ccagacatga ataaaaatgt ggccaaacct  
 2340  
 tcaccggtgg tgggacagct catagacctg agctccctc tgatccagct gagccctgag  
 2400  
 gctgacaagg agaactgga ttccccactc ctcaagttct aagccgaacc aaatcctttg  
 2460  
 ccttgaaaga acagccctaa agtgggtttc aaccctcaga aacaagcttt aggctggctg  
 2520  
 cagtggctta cacttgtaac cctagaactt gggaggctga ggtgggcgga ttacttgagc  
 2580  
 ccaggagtgc gggaccagcc tgggaaatat agtgaaactc ctgtccctac aaaaaataca  
 2640  
 aaaattagcc ggggtgtgga gtgcatgcct gtagtcccag ctacttgga ggctgaagtg  
 2700  
 ggaggatggc ctgagctcaa ggagatgcag gctgcagtgg gctgtgattg tgccactgca  
 2760  
 ctccagcctg ggcaccaatg tgagaacctg tcttgga aaaaaaaaag aaacatgttt  
 2820  
 tagtagaagt tttatttgaa aaagaaaaat aagcataaat atattcccag tgctggagag  
 2880  
 ggtgggctga gggactgggg ccagcacgga ccaccaagg cctctgcttc ccgcccac  
 2940  
 cctcctcgct gccattctct gggctggaat gtgaagcctc agtcactcta aatgaagaat  
 3000  
 tttcttttga atgttttgta tgtaaaatag caagtggcta tttttaagt taagtttgta  
 3060  
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&lt;210&gt; 5822

&lt;211&gt; 712

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5822

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Ser	Ser	Ser	Ala	Asn	Glu	Asp	Asp	Glu	Val	Phe	Phe	Gly	Pro	Phe	Gly
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His	Lys	Glu	Arg	Cys	Ile	Ala	Ala	Ser	Leu	Glu	Leu	Asn	Asn	Pro	Val
		35				40					45				
Pro	Glu	Gln	Pro	Pro	Leu	Pro	Thr	Ser	Glu	Ser	Pro	Phe	Ala	Trp	Ser
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Pro	Leu	Ala	Gly	Glu	Lys	Phe	Val	Glu	Val	Tyr	Lys	Glu	Ala	His	Leu
65			70					75					80		
Leu	Ala	Leu	His	Ile	Glu	Ser	Ser	Ser	Arg	Asn	Gln	Ala	Ala	Gln	Ala
		85			90						95				
Ala	Lys	Pro	Glu	Asp	Pro	Arg	Ser	Gln	Gly	Val	Glu	Arg	Phe	Ile	Gln

4986



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 545                      550                      555                      560  
 Ser Arg Leu Val Asp Val Ser Pro Asp Arg Gly Ser Pro Pro Ser Arg  
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 Val Pro Gln Ala Leu Asn Phe Ser Pro Glu Glu Ser Asp Ser Thr Phe  
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 Ser Lys Ser Thr Ala Thr Glu Val Ala Arg Glu Glu Ala Lys Pro Gly  
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&lt;210&gt; 5823

&lt;211&gt; 2585

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5823

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<211> 213

<212> PRT

<213> Homo sapiens

<400> 5824

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Met	Ala	Lys	Ile	Gly	Asn	Lys	Glu	Ala	Cys	Lys	Val	Leu	Ala	Lys	Gln	50	55	60	
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Asn	Lys	Lys	Met	Asp	Pro	Gln	Lys	Thr	Leu	Gln	Thr	Met	Gln	Asn	Phe	115	120	125	
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Thr	Leu	Asp	Asp	Ile	Phe	Asp	Gly	Ser	Asp	Asp	Glu	Glu	Glu	Ser	Gln	145	150	155	160
Asp	Ile	Val	Asn	Gln	Val	Leu	Asp	Glu	Ile	Gly	Ile	Glu	Ile	Ser	Gly	165	170	175	
Lys	Met	Ala	Lys	Ala	Pro	Ser	Ala	Ala	Arg	Ser	Leu	Pro	Ser	Ala	Ser	180	185	190	
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<211> 1940

<212> DNA

<213> Homo sapiens

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<210> 5826

<211> 88

<212> PRT

<213> Homo sapiens

<400> 5826

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Gly	Val	Ser	Pro	Ser	Glu	Ala	Ser	Leu	His	Cys	Val	Lys	Glu	Ala	Pro
			20					25				30			
Ser	Cys	Ser	Arg	Gly	Leu	Leu	Pro	Leu	Pro	Ile	Pro	Ser	Pro	Val	
		35					40				45				
Lys	Cys	Leu	Cys	Phe	Ala	Tyr	Cys	Val	Trp	Met	Cys	Val	Cys	Val	Cys
	50					55				60					
Val	Cys	Val	Cys	Val	Cys	Val	Cys	Phe	Cys	Val	Cys	Leu	Met	Leu	Cys
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<211> 428

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<213> Homo sapiens

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&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5828

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Pro Thr Ser Cys Phe His Leu Phe Trp Ala Arg His Arg Leu Ser Asn
 35      40      45
Trp Glu Arg Pro Leu Phe Ile Lys Leu Gly Phe Phe Leu Ile Ser Leu
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Pro Asn Val Val Ser Gln Tyr Ser Ser Tyr Ser Ser Leu Gln Gly Val
 65      70      75      80
Ala Glu Pro Thr Trp Ser Phe Glu Thr Gly Pro Gln Ala Gly Ala Phe
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Asn Leu Asp Ser Leu Ala Cys Cys Asp Pro
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&lt;210&gt; 5829

&lt;211&gt; 5747

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5829

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<211> 1479

<212> PRT

<213> Homo sapiens

<400> 5830

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Pro	Gly	Asp	Ala	Ala	Leu	Pro	Glu	Pro	Asn	Val	Phe	Leu	Ile	Phe	Ser
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His	Gly	Leu	Gln	Gly	Cys	Leu	Glu	Ala	Gln	Gly	Gly	Gln	Val	Arg	Val
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Thr	Pro	Ala	Cys	Asn	Thr	Ser	Leu	Pro	Ala	Gln	Arg	Trp	Lys	Trp	Val
65					70					75					80
Ser	Arg	Asn	Arg	Leu	Phe	Asn	Leu	Gly	Thr	Met	Gln	Cys	Leu	Gly	Thr
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Gly	Trp	Pro	Gly	Thr	Asn	Thr	Thr	Ala	Ser	Leu	Gly	Met	Tyr	Glu	Cys
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Asp	Arg	Glu	Ala	Leu	Asn	Leu	Arg	Trp	His	Cys	Arg	Thr	Leu	Gly	Asp
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Gln	Leu	Ser	Leu	Leu	Leu	Gly	Ala	Arg	Thr	Ser	Asn	Ile	Ser	Lys	Pro
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Gly	Thr	Leu	Glu	Arg	Gly	Asp	Gln	Thr	Arg	Ser	Gly	Gln	Trp	Arg	Ile
145					150				155						160
Tyr	Gly	Ser	Glu	Glu	Asp	Leu	Cys	Ala	Leu	Pro	Tyr	His	Glu	Val	Tyr
			165					170					175		
Thr	Ile	Gln	Gly	Asn	Ser	His	Gly	Lys	Pro	Cys	Thr	Ile	Pro	Phe	Lys
		180					185						190		
Tyr	Asp	Asn	Gln	Trp	Phe	His	Gly	Cys	Thr	Ser	Thr	Gly	Arg	Glu	Asp
		195					200					205			
Gly	His	Leu	Trp	Cys	Ala	Thr	Thr	Gln	Asp	Tyr	Gly	Lys	Asp	Glu	Arg
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Trp	Gly	Phe	Cys	Pro	Ile	Lys	Ser	Asn	Asp	Cys	Glu	Thr	Phe	Trp	Asp
225					230				235						240
Lys	Asp	Gln	Leu	Thr	Asp	Ser	Cys	Tyr	Gln	Phe	Asn	Phe	Gln	Ser	Thr
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Leu	Ser	Trp	Arg	Glu	Ala	Trp	Ala	Ser	Cys	Glu	Gln	Gln	Gly	Ala	Asp
		260					265						270		
Leu	Leu	Ser	Ile	Thr	Glu	Ile	His	Glu	Gln	Thr	Tyr	Ile	Asn	Gly	Leu
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Leu	Thr	Gly	Tyr	Ser	Ser	Thr	Leu	Trp	Ile	Gly	Leu	Asn	Asp	Leu	Asp
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Thr	Ser	Gly	Gly	Trp	Gln	Trp	Ser	Asp	Asn	Ser	Pro	Leu	Lys	Tyr	Leu
305					310				315						320
Asn	Trp	Glu	Ser	Asp	Gln	Pro	Asp	Asn	Pro	Ser	Glu	Glu	Asn	Cys	Gly
			325					330					335		
Val	Ile	Arg	Thr	Glu	Ser	Ser	Gly	Gly	Trp	Gln	Asn	Arg	Asp	Cys	Ser
		340					345					350			
Ile	Ala	Leu	Pro	Tyr	Val	Cys	Lys	Lys	Lys	Pro	Asn	Ala	Thr	Ala	Glu

355 360 365  
 Pro Thr Pro Pro Asp Arg Trp Ala Asn Val Lys Val Glu Cys Glu Pro  
 370 375 380  
 Ser Trp Gln Pro Phe Gln Gly His Cys Tyr Arg Leu Gln Ala Glu Lys  
 385 390 395 400  
 Arg Ser Trp Gln Glu Ser Lys Lys Ala Cys Leu Arg Gly Gly Gly Asp  
 405 410 415  
 Leu Val Ser Ile His Ser Met Ala Glu Leu Glu Phe Ile Thr Lys Gln  
 420 425 430  
 Ile Lys Gln Glu Val Glu Glu Leu Trp Ile Gly Leu Asn Asp Leu Lys  
 435 440 445  
 Leu Gln Met Asn Phe Glu Trp Ser Asp Gly Ser Leu Val Ser Phe Thr  
 450 455 460  
 His Trp His Pro Phe Glu Pro Asn Asn Phe Arg Asp Ser Leu Glu Asp  
 465 470 475 480  
 Cys Val Thr Ile Trp Gly Pro Glu Gly Arg Trp Asn Asp Ser Pro Cys  
 485 490 495  
 Asn Gln Ser Leu Pro Ser Ile Cys Lys Lys Ala Gly Gln Leu Ser Gln  
 500 505 510  
 Gly Ala Ala Glu Glu Asp His Gly Cys Arg Lys Gly Trp Thr Trp His  
 515 520 525  
 Ser Pro Ser Cys Tyr Trp Leu Gly Glu Asp Gln Val Thr Tyr Ser Glu  
 530 535 540  
 Ala Arg Arg Leu Cys Thr Asp His Gly Ser Gln Leu Val Thr Ile Thr  
 545 550 555 560  
 Asn Arg Phe Glu Gln Ala Phe Val Ser Ser Leu Ile Tyr Asn Trp Glu  
 565 570 575  
 Gly Glu Tyr Phe Trp Thr Ala Leu Gln Asp Leu Asn Ser Thr Gly Ser  
 580 585 590  
 Phe Phe Trp Leu Ser Gly Asp Glu Val Met Tyr Thr His Trp Asn Arg  
 595 600 605  
 Asp Gln Pro Gly Tyr Ser Arg Gly Gly Cys Val Ala Leu Ala Thr Gly  
 610 615 620  
 Ser Ala Met Gly Leu Trp Glu Val Lys Asn Cys Thr Ser Phe Arg Ala  
 625 630 635 640  
 Arg Tyr Ile Cys Arg Gln Ser Leu Gly Thr Pro Val Thr Pro Glu Leu  
 645 650 655  
 Pro Gly Pro Asp Pro Thr Pro Ser Leu Thr Gly Ser Cys Pro Gln Gly  
 660 665 670  
 Trp Ala Ser Asp Thr Lys Leu Arg Tyr Cys Tyr Lys Val Phe Ser Ser  
 675 680 685  
 Glu Arg Leu Gln Asp Lys Lys Ser Trp Val Gln Ala Gln Gly Ala Cys  
 690 695 700  
 Gln Glu Leu Gly Ala Gln Leu Leu Ser Leu Ala Ser Tyr Glu Glu Glu  
 705 710 715 720  
 His Phe Val Ala Asn Met Leu Asn Lys Ile Phe Gly Glu Ser Glu Pro  
 725 730 735  
 Glu Ile His Glu Gln His Trp Phe Trp Ile Gly Leu Asn Arg Arg Asp  
 740 745 750  
 Pro Arg Gly Gly Gln Ser Trp Arg Trp Ser Asp Gly Val Gly Phe Ser  
 755 760 765  
 Tyr His Asn Phe Asp Arg Ser Arg His Asp Asp Asp Ile Arg Gly  
 770 775 780  
 Cys Ala Val Leu Asp Leu Ala Ser Leu Gln Trp Val Ala Met Gln Cys

785		790		795		800
Asp Thr Gln Leu	Asp Trp Ile Cys Lys	Ile Pro Arg Gly Thr	Asp Val			
	805		810		815	
Arg Glu Pro Asp	Asp Ser Pro Gln Gly Arg	Arg Glu Trp Leu Arg	Phe			
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Gln Glu Ala Glu Tyr	Lys Phe Phe Glu His His	Ser Thr Trp Ala Gln				
	835		840		845	
Ala Gln Arg Ile Cys Thr	Trp Phe Gln Ala Glu Leu Thr	Ser Val His				
	850		855		860	
Ser Gln Ala Glu Leu Asp	Phe Leu Ser His Asn Leu Gln Lys	Phe Ser				
865		870		875		880
Arg Ala Gln Glu Gln His	Trp Trp Ile Gly Leu His Thr	Ser Glu Ser				
	885		890		895	
Asp Gly Arg Phe Arg Trp	Thr Asp Gly Ser Ile Ile	Asn Phe Ile Ser				
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Trp Ala Pro Gly Lys Pro	Arg Pro Val Gly Lys Asp	Lys Lys Cys Val				
	915		920		925	
Tyr Met Thr Ala Ser Arg	Glu Asp Trp Gly Asp Gln Arg	Cys Leu Thr				
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Ala Leu Pro Tyr Ile Cys	Lys Arg Ser Asn Val Thr Lys	Glu Thr Gln				
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Pro Pro Asp Leu Pro Thr	Thr Ala Leu Gly Gly Cys Pro	Ser Asp Trp				
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Ile Gln Phe Leu Asn Lys	Cys Phe Gln Val Gln Gly Gln	Glu Pro Gln				
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Ser Arg Val Lys Trp Ser	Glu Ala Gln Phe Ser Cys	Glu Gln Gln Glu				
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Ala Gln Leu Val Thr Ile	Thr Asn Pro Leu Glu Gln Ala	Phe Ile Thr				
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Ala Ser Leu Pro Asn Val	Thr Phe Asp Leu Trp Ile Gly	Leu His Ala				
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Ser Gln Arg Asp Phe Gln	Trp Val Glu Gln Glu Pro Leu	Met Tyr Ala				
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Asn Trp Ala Pro Gly Glu	Pro Ser Gly Pro Ser Pro Ala	Pro Ser Gly				
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Asn Lys Pro Thr Ser Cys	Ala Val Val Leu His Ser Pro	Ser Ala His				
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Phe Thr Gly Arg Trp Asp	Asp Arg Ser Cys Thr Glu Glu	Thr His Gly				
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Phe Ile Cys Gln Lys Gly	Thr Asp Pro Ser Leu Ser Pro	Ser Pro Ala				
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Ala Leu Pro Pro Ala Pro	Gly Thr Glu Leu Ser Tyr Leu	Asn Gly Thr				
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Phe Arg Leu Leu Gln Lys	Pro Leu Arg Trp His Asp	Ala Leu Leu Leu				
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Cys Glu Ser His Asn Ala	Ser Leu Ala Tyr Val Pro Asp	Pro Tyr Thr				
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Gln Ala Phe Leu Thr Gln	Ala Ala Arg Gly Leu Arg Thr	Pro Leu Trp				
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Ile Gly Leu Ala Gly Glu	Glu Gly Ser Arg Arg Tyr Ser	Trp Val Ser				
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Glu Glu Pro Leu Asn Tyr	Val Gly Trp Gln Asp Gly Glu	Pro Gln Gln				
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Pro Gly Gly Cys Thr Tyr	Val Asp Val Asp Gly Ala Trp	Arg Thr Thr				

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 Ser Cys Asp Thr Lys Leu Gln Gly Ala Val Cys Gly Val Ser Ser Gly  
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 Pro Pro Pro Pro Arg Arg Ile Ser Tyr His Gly Ser Cys Pro Gln Gly  
 1250 1255 1260  
 Leu Ala Asp Ser Ala Trp Ile Pro Phe Arg Glu His Cys Tyr Ser Phe  
 1265 1270 1275 1280  
 His Met Glu Leu Leu Leu Gly His Lys Glu Ala Arg Gln Arg Cys Gln  
 1285 1290 1295  
 Arg Ala Gly Gly Ala Val Leu Ser Ile Leu Asp Glu Met Glu Asn Val  
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 Phe Val Trp Glu His Leu Gln Ser Tyr Glu Gly Gln Ser Arg Gly Ala  
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 Trp Leu Gly Met Asn Phe Asn Pro Lys Gly Gly Thr Leu Val Trp Gln  
 1330 1335 1340  
 Asp Asn Thr Ala Val Asn Tyr Ser Asn Trp Gly Pro Pro Gly Leu Gly  
 1345 1350 1355 1360  
 Pro Ser Met Leu Ser His Asn Ser Cys Tyr Trp Ile Gln Ser Asn Ser  
 1365 1370 1375  
 Gly Leu Trp Arg Pro Gly Ala Cys Thr Asn Ile Thr Met Gly Val Val  
 1380 1385 1390  
 Cys Lys Leu Pro Arg Ala Glu Gln Ser Ser Phe Ser Pro Ser Ala Leu  
 1395 1400 1405  
 Pro Glu Asn Pro Ala Ala Leu Val Val Val Leu Met Ala Val Leu Leu  
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 Ser Ile Glu Arg Gly Ala Phe Glu Gly Ala Arg Tyr Ser Arg Ser Ser  
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&lt;210&gt; 5831

&lt;211&gt; 2216

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5831

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<210> 5832

<211> 322

<212> PRT

<213> Homo sapiens

<400> 5832

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 His Lys Glu Phe Gln Gln Asn Asn Trp His Ala Val Gly Cys Gly Phe  
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 Arg Arg Ala Arg Pro Lys Phe Glu Gln Val Asn Leu Leu Asp Ser Asn  
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 Ala Val His His Ile Ile His Asp Phe Gln Pro His Val Ile Val His  
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 Cys Ala Ala Glu Arg Arg Pro Asp Val Val Glu Asn Gln Pro Asp Ala  
 85 90 95  
 Ala Ser Gln Leu Asn Val Asp Ala Ser Gly Asn Leu Ala Lys Glu Ala  
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 Ala Ala Val Gly Ala Phe Leu Ile Tyr Ile Ser Ser Asp Tyr Val Phe  
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 Asp Gly Thr Asn Pro Pro Tyr Arg Glu Glu Asp Ile Pro Ala Pro Leu  
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 Asn Leu Tyr Gly Lys Thr Lys Leu Asp Gly Glu Lys Ala Val Leu Glu  
 145 150 155 160  
 Asn Asn Leu Gly Ala Ala Val Leu Arg Ile Pro Ile Leu Tyr Gly Glu  
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 Val Glu Lys Leu Glu Glu Ser Ala Val Thr Val Met Phe Asp Lys Val  
 180 185 190  
 Gln Phe Ser Asn Lys Ser Ala Asn Met Asp His Trp Gln Gln Arg Phe  
 195 200 205  
 Pro Thr His Val Lys Asp Val Ala Thr Val Cys Arg Gln Leu Ala Glu  
 210 215 220  
 Lys Arg Met Leu Asp Pro Ser Ile Lys Gly Thr Phe His Trp Ser Gly  
 225 230 235 240  
 Asn Glu Gln Met Thr Lys Tyr Glu Met Ala Cys Ala Ile Ala Asp Ala  
 245 250 255  
 Phe Asn Leu Pro Ser Ser His Leu Arg Pro Ile Thr Asp Ser Pro Val  
 260 265 270  
 Leu Gly Ala Gln Arg Pro Arg Asn Ala Gln Leu Asp Cys Ser Lys Leu  
 275 280 285  
 Glu Thr Leu Gly Ile Gly Gln Arg Thr Pro Phe Arg Ile Gly Ile Lys  
 290 295 300  
 Glu Ser Leu Trp Pro Phe Leu Ile Asp Lys Arg Trp Arg Gln Thr Val  
 305 310 315 320  
 Phe His

&lt;210&gt; 5833

&lt;211&gt; 805

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5833

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780  
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&lt;210&gt; 5834

&lt;211&gt; 268

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5834

Lys Leu Ala Ala Ala Gln Gly Gln Ala Pro Leu Glu Pro Thr Gln Asp  
1 5 10 15  
Gly Ser Ala Ile Glu Thr Cys Pro Lys Gly Asp Glu Pro Arg Gly Asp  
20 25 30  
Glu Gln Gln Val Glu Ser Met Thr Pro Lys Pro Val Leu Gln Glu Glu  
35 40 45  
Asn Asn Gln Glu Ser Phe Ile Ala Phe Ala Arg Val Phe Ser Gly Val  
50 55 60  
Ala Arg Arg Gly Lys Lys Ile Phe Val Leu Gly Pro Lys Tyr Ser Pro  
65 70 75 80  
Leu Glu Phe Leu Arg Arg Val Pro Leu Gly Phe Ser Ala Pro Pro Asp



85 90 95  
 Gly Leu Pro Gln Val Pro His Met Ala Tyr Cys Ala Leu Glu Asn Leu  
 100 105 110  
 Tyr Leu Leu Met Gly Arg Glu Leu Glu Tyr Leu Glu Glu Val Pro Pro  
 115 120 125  
 Gly Asn Val Leu Gly Ile Gly Gly Leu Gln Asp Phe Val Leu Lys Ser  
 130 135 140  
 Ala Thr Leu Cys Ser Leu Pro Ser Cys Pro Pro Phe Ile Pro Leu Asn  
 145 150 155 160  
 Phe Glu Ala Thr Pro Ile Val Arg Val Ala Val Glu Pro Lys His Pro  
 165 170 175  
 Ser Glu Met Pro Gln Leu Val Lys Gly Met Lys Leu Leu Asn Gln Ala  
 180 185 190  
 Asp Pro Cys Val Gln Ile Leu Ile Gln Glu Thr Gly Glu His Val Leu  
 195 200 205  
 Val Thr Ala Gly Glu Val His Leu Gln Arg Cys Leu Asp Asp Leu Lys  
 210 215 220  
 Glu Arg Phe Ala Lys Ile His Ile Ser Val Ser Glu Pro Ile Ile Pro  
 225 230 235 240  
 Phe Arg Glu Thr Ile Thr Lys Pro Pro Lys Val Asp Met Val Asn Glu  
 245 250 255  
 Glu Ile Gly Lys Gln Gln Lys Val Ala Val Ile His  
 260 265

&lt;210&gt; 5835

&lt;211&gt; 420

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5835

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&lt;210&gt; 5836

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5836

Xaa Leu Glu Gln Arg Trp Gly Phe Gly Leu Glu Glu Leu Tyr Gly Leu  
 1 5 10 15  
 Ala Leu Arg Phe Phe Lys Glu Lys Asp Gly Lys Ala Phe His Pro Thr

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      20      25      30
Tyr Glu Glu Lys Leu Lys Leu Val Ala Leu His Lys Gln Val Leu Met
      35      40      45
Gly Pro Tyr Asn Pro Asp Thr Cys Pro Glu Val Gly Phe Phe Asp Val
      50      55      60
Leu Gly Asn Asp Arg Arg Arg Glu Trp Ala Ala Leu Gly Asn Met Ser
65      70      75      80
Lys Glu Asp Ala Met Val Glu Phe Val Lys Leu Leu Asn Arg Cys Cys
      85      90      95
His Leu Phe Ser Thr Tyr Val Ala Ser His Lys Ile Glu Lys Glu Glu
      100      105      110
Gln Asp Lys Lys Arg Lys Glu Glu Glu Arg Arg Arg Arg Glu Glu
      115      120      125
Glu Glu Arg Glu Arg Leu Gln Lys Glu Glu Glu Lys
      130      135      140

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&lt;210&gt; 5837

&lt;211&gt; 582

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5837

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582

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&lt;210&gt; 5838

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5838

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Xaa Arg Leu Ser Pro Phe Leu Pro His Asp His Leu Gly Leu Ala Val
1      5      10      15
Phe Ser Met Leu Cys Cys Phe Trp Pro Val Gly Ile Ala Ala Phe Cys
      20      25      30
Leu Ala Gln Lys Thr Asn Lys Ala Trp Ala Lys Gly Asp Ile Gln Gly

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	35		40		45	
Ala	Gly	Ala	Ala	Ser	Arg	Arg
	50		55		60	
Gly	Leu	Gly	Val	Cys	Thr	Tyr
65		70		75		80
Tyr	Leu	Ala	Ser	Arg	Asp	Pro
		85				

&lt;210&gt; 5839

&lt;211&gt; 1895

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5839

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<210> 5840

<211> 138

<212> PRT

<213> Homo sapiens

<400> 5840

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			20					25					30		
Leu	Met	Val	His	Gly	Trp	Cys	Pro	Val	Ile	Phe	Ser	Trp	Ala	Val	Ala
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Pro	Arg	Gly	Ser	Gly	Phe	Pro	Ala	Gln	Gly	Ile	Phe	Asp	Pro	Cys	Gln
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<210> 5841

<211> 3411

<212> DNA

<213> Homo sapiens

&lt;400&gt; 5841

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<212> PRT

<213> Homo sapiens

<400> 5842

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Thr	Leu	Trp	Gly	His	Glu	Asn	Pro	Phe	Ser	Asp	Leu	Pro	Ser	Gly	Thr
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Gln	Ser	Asp	Ala	Ala	Leu	Gln	Val	Asp	Ile	Ser	Asp	Ala	Leu	Ser	Glu
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Glu	Tyr	His	Asn	Arg	Val	Lys	Asp	Ala	Ser	Ala	Lys	Ser	Asp	Arg	Met
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 Ile Asp Phe Lys Thr Arg Arg Val Ala Ala Phe Arg Lys Asn Leu Val  
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 Glu Leu Ala Glu Leu Glu Leu Lys His Ala Lys Gly Asn Leu Gln Leu  
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&lt;210&gt; 5843

&lt;211&gt; 6446

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5843

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<211> 823

<212> PRT

<213> Homo sapiens

<400> 5844

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Gln Val Glu Val Met Leu His Arg Arg Leu Trp Asn Asn Phe Asp Trp		
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Asp Leu Gly Tyr Asn Leu Thr Leu Asn Asp Thr Ser Val Val His Pro		
675	680	685
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Asp Leu Ala Gly Thr Ala Pro Lys Leu Pro Gly Pro Gln Gln Gln Glu		
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Ala Val Thr Leu Pro Pro Asn Leu His Leu Gln Ile Leu Ser Ile Pro		
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Gly Trp Arg Tyr Ser Ser Asn His Thr Glu His Ser Gln Asn Leu Arg		
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Lys Gly His Arg Gly Glu Ala Gln Ala Asp Leu Arg Arg Val Leu Leu		
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Arg Leu Tyr His Leu Tyr Glu Val Gly Glu Asp Pro Val Leu Ser Gln		
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&lt;210&gt; 5845

&lt;211&gt; 2762

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5845

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<211> 257

<212> PRT

<213> Homo sapiens

<400> 5846

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Glu				

&lt;210&gt; 5847

&lt;211&gt; 1021

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5847

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&lt;210&gt; 5848

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5848

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 Tyr Leu Val Lys Arg Arg Gly Arg Trp Tyr Val Tyr Cys Lys Thr His  
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&lt;210&gt; 5849

&lt;211&gt; 3174

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5849

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<210> 5850

<211> 154

<212> PRT

<213> Homo sapiens

<400> 5850

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			20					25						30	
Cys	Thr	Gln	Thr	Gly	His	Ala	Gln	Pro	Cys	Pro	Ser	Ala	Pro	Ser	Thr
		35					40					45			
Gly	Pro	Ile	His	Ile	Ala	Glu	Gly	Gly	Arg	Gly	Arg	Pro	Pro	Pro	Gly
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Ser	Ala	Ser	Asn	Pro	Gln	Pro	Pro	Gly	Ser	Pro	His	Cys	Pro	Ser	Ala
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Gly	Leu	Ser	Pro	Val	Pro	Gly	Val	Gly	Gly	Arg	Gln	Cys	Pro	Gly	Thr
				85					90					95	
Val	Pro	Arg	Val	Arg	Arg	Pro	Gly	Leu	Ala	Gly	His	Pro	Val	Thr	His
			100					105						110	
Arg	Ile	Asn	Arg	Lys	Thr	Ala	Ser	Pro	Pro	Asn	Leu	Cys	Pro	Arg	His
		115					120					125			
Asn	Met	Ser	Arg	Ser	Glu	Ser	Cys	Thr	Pro	Arg	Ser	Arg	Ala	Pro	Leu
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Gln	Arg	Thr	Leu	Thr	Pro	Pro	Arg	Gly	Ala						
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<210> 5851

<211> 488

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5851

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488

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&lt;210&gt; 5852

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5852

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Asn Lys Thr Ser Glu Asp Val Thr Met Ala Ala Ser Pro Val Thr
20          25          30
Leu Thr Lys Gly Thr Ser Ala Ala His Leu Asn Ser Met Glu Val Thr
35          40          45
Thr Glu Asp Thr Ser Arg Thr Asp Ala Tyr Glu Ser Tyr Lys Lys Lys
50          55          60
Asp Tyr Thr Gln Val Asp Tyr Leu Ile Asn Gly Met Tyr Ala Asp Ser
65          70          75          80
Glu Met

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&lt;210&gt; 5853

&lt;211&gt; 487

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5853

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180

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 360  
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<210> 5854

<211> 68

<212> PRT

<213> Homo sapiens

<400> 5854

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Tyr	Arg	Arg	Ser	Gln	Glu	Gly	Gly	Pro	Ala	Arg	Pro	Ala	Ala	Pro	Asp
			20					25					30		
Thr	Pro	Ser	Gly	Arg	Ser	Gly	Pro	Ala	Ala	Pro	Trp	Arg	Thr	Pro	Ala
			35					40					45		
Arg	Thr	Pro	Pro	Arg	Leu	Leu	Pro	Thr	Leu	Cys	Pro	Val	Thr	Pro	Val
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Ser	Trp	Pro	Leu												
65															

<210> 5855

<211> 362

<212> DNA

<213> Homo sapiens

<400> 5855

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 180  
 taacgaggtt gttgcagaag tcctcctggc ggcacacgaa ggtgtaggag atcagggaga  
 240  
 ggccggggcc catccggtgc tcagtgcgc ggggctcctg gtccttggcc tccgtgcagc  
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 360  
 an  
 362

<210> 5856

<211> 113

<212> PRT

<213> Homo sapiens

<400> 5856

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Val Thr Ala Pro Leu Cys Ser Ala Asp Pro Leu Leu Ala Val Pro Pro
      20           25           30
Ser Pro Pro Asp Pro Pro Ala Gly Thr Cys Trp Gly Leu Trp Gly Pro
      35           40           45
Lys Arg Glu Gly Val Asn Glu Val Val Ala Glu Val Leu Leu Ala Ala
      50           55           60
His Glu Gly Val Gly Asp Gln Gly Glu Ala Gly Ala His Pro Val Leu
65           70           75           80
Ser Asp Ala Gly Leu Leu Val Leu Gly Leu Arg Ala Ala Leu Gly Glu
      85           90           95
His Gln Ala His Leu Gly Ser Ala Leu Asn Glu His Gln Arg Val Leu
      100           105           110
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<210> 5857

<211> 1751

<212> DNA

<213> Homo sapiens

<400> 5857

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840

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 1751

&lt;210&gt; 5858

&lt;211&gt; 434

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5858

Met	Asp	Ser	Val	Glu	Lys	Gly	Ala	Ala	Thr	Ser	Val	Ser	Asn	Pro	Arg
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Gly	Arg	Pro	Ser	Arg	Gly	Arg	Pro	Pro	Lys	Leu	Gln	Arg	Asn	Ser	Arg
			20					25					30		
Gly	Gly	Gln	Gly	Arg	Gly	Gly	Glu	Lys	Pro	Pro	His	Leu	Ala	Ala	Leu
		35					40					45			
Ile	Leu	Ala	Arg	Gly	Gly	Ser	Lys	Gly	Ile	Pro	Leu	Lys	Asn	Ile	Lys
	50					55					60				
His	Leu	Ala	Gly	Val	Pro	Leu	Ile	Gly	Trp	Val	Leu	Arg	Ala	Ala	Leu
65					70				75					80	
Asp	Ser	Gly	Ala	Phe	Gln	Ser	Val	Trp	Val	Ser	Thr	Asp	His	Asp	Glu
			85					90					95		
Ile	Glu	Asn	Val	Ala	Lys	Gln	Phe	Gly	Ala	Gln	Val	His	Arg	Arg	Ser
			100					105					110		
Ser	Glu	Val	Ser	Lys	Asp	Ser	Ser	Thr	Ser	Leu	Asp	Ala	Ile	Ile	Glu



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Thr Ser Pro Cys Leu His Pro Thr Asp Leu Gln Lys Val Ala Glu Met
145      150      155      160
Ile Arg Glu Glu Gly Tyr Asp Ser Val Phe Ser Val Val Arg Arg His
      165      170      175
Gln Phe Arg Trp Ser Glu Ile Gln Lys Gly Val Arg Glu Val Thr Glu
      180      185      190
Pro Leu Asn Leu Asn Pro Ala Lys Arg Pro Arg Arg Gln Asp Trp Asp
      195      200      205
Gly Glu Leu Tyr Glu Asn Gly Ser Phe Tyr Phe Ala Lys Arg His Leu
      210      215      220
Ile Glu Met Gly Tyr Leu Gln Gly Gly Lys Met Ala Tyr Tyr Glu Met
225      230      235      240
Arg Ala Glu His Ser Val Asp Ile Asp Val Asp Ile Asp Trp Pro Ile
      245      250      255
Ala Glu Gln Arg Val Leu Arg Tyr Gly Tyr Phe Gly Lys Glu Lys Leu
      260      265      270
Lys Glu Ile Lys Leu Leu Val Cys Asn Ile Asp Gly Cys Leu Thr Asn
      275      280      285
Gly His Ile Tyr Val Ser Gly Asp Gln Lys Glu Ile Ile Ser Tyr Asp
      290      295      300
Val Lys Asp Ala Ile Gly Ile Ser Leu Leu Lys Lys Ser Gly Ile Glu
305      310      315      320
Val Arg Leu Ile Ser Glu Arg Ala Cys Ser Lys Gln Thr Leu Ser Ser
      325      330      335
Leu Lys Leu Asp Cys Lys Met Glu Val Ser Val Ser Asp Lys Leu Ala
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Val Val Asp Glu Trp Arg Lys Glu Met Gly Leu Cys Trp Lys Glu Val
      355      360      365
Ala Tyr Leu Gly Asn Glu Val Ser Asp Glu Glu Cys Leu Lys Arg Val
      370      375      380
Gly Leu Ser Gly Ala Pro Ala Asp Ala Cys Ser Thr Ala Gln Lys Ala
385      390      395      400
Val Gly Tyr Ile Cys Lys Cys Asn Gly Gly Arg Gly Ala Ile Arg Glu
      405      410      415
Phe Ala Glu His Ile Cys Leu Leu Met Glu Lys Val Asn Asn Ser Cys
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Gln Lys

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&lt;210&gt; 5859

&lt;211&gt; 2267

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5859

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180

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<210> 5860

<211> 96

<212> PRT

<213> Homo sapiens

<400> 5860

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			20					25					30		
Ser	Arg	Ala	Ser	Glu	Ala	Ser	Gly	Ser	Leu	Leu	Leu	Arg	Phe	Phe	Leu
		35					40					45			
Gln	Met	Gly	Leu	Gly	Arg	Cys	Arg	Phe	Cys	Phe	Ser	Pro	Trp	Leu	Pro
	50					55					60				
Val	Arg	Pro	Gln	Pro	Ser	Gly	Cys	Asp	Ile	Ile	Glu	Ser	Ala	Val	Ser
65					70				75					80	
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<210> 5861

<211> 1951

<212> DNA

<213> Homo sapiens

<400> 5861

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<210> 5862  
 <211> 514  
 <212> PRT  
 <213> Homo sapiens

<400> 5862

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           20           25           30
Pro Asp Leu Lys Val Ile Tyr Ile Leu Val Arg Pro Lys Ala Gly Gln
           35           40           45
Thr Leu Gln Gln Arg Val Phe Gln Ile Leu Asp Ser Lys Leu Phe Glu
           50           55           60
Lys Val Lys Glu Val Cys Pro Asn Val His Glu Lys Ile Arg Ala Ile
           65           70           75           80
Tyr Ala Asp Leu Asn Gln Asn Asp Phe Ala Ile Ser Lys Glu Asp Met
           85           90           95
Gln Glu Leu Leu Ser Cys Thr Asn Ile Ile Phe His Cys Ala Ala Thr
           100          105          110
Val Arg Phe Asp Asp Thr Leu Arg His Ala Val Gln Leu Asn Val Thr
           115          120          125
Ala Thr Arg Gln Leu Leu Leu Met Ala Ser Gln Met Pro Lys Leu Glu
           130          135          140
Ala Phe Ile His Ile Ser Thr Ala Tyr Ser Asn Cys Asn Leu Lys His
           145          150          155          160
Ile Asp Glu Val Ile Tyr Pro Cys Pro Val Glu Pro Lys Lys Lys Ile
           165          170          175
Ile Asp Ser Leu Glu Trp Leu Asp Asp Ala Ile Ile Asp Glu Ile Thr
           180          185          190
Pro Lys Leu Ile Arg Asp Trp Pro Asn Ile Tyr Thr Tyr Thr Lys Ala
           195          200          205
Leu Gly Glu Met Val Val Gln Gln Glu Ser Arg Asn Leu Asn Ile Ala
           210          215          220
Ile Ile Arg Pro Ser Ile Val Gly Ala Thr Trp Gln Glu Pro Phe Pro
           225          230          235          240
Gly Trp Val Asp Asn Ile Asn Gly Pro Asn Gly Ile Ile Ile Ala Thr
           245          250          255
Gly Lys Gly Phe Leu Arg Ala Ile Lys Ala Thr Pro Met Ala Val Ala
           260          265          270
Asp Val Ile Pro Val Asp Thr Val Val Asn Leu Met Leu Ala Val Gly
           275          280          285
Trp Tyr Thr Ala Val His Arg Pro Lys Ser Thr Leu Val Tyr His Ile
           290          295          300
Thr Ser Gly Asn Met Asn Pro Cys Asn Trp His Lys Met Gly Val Gln
           305          310          315          320
Val Leu Ala Thr Phe Glu Lys Ile Pro Phe Glu Arg Pro Phe Arg Arg
           325          330          335
Pro Asn Ala Asn Phe Thr Ser Asn Ser Phe Thr Ser Gln Tyr Trp Asn
           340          345          350
Ala Val Ser His Arg Ala Pro Ala Ile Ile Tyr Asp Cys Tyr Leu Arg
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Leu Thr Gly Arg Lys Pro Arg Met Thr Lys Leu Met Asn Arg Leu Leu

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385              390              395              400
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      405              410              415
Gln Arg Val Phe Asn Phe Asp Val Arg Gln Leu Asn Trp Leu Glu Tyr
      420              425              430
Ile Glu Asn Tyr Val Leu Gly Val Lys Lys Tyr Leu Leu Lys Glu Asp
      435              440              445
Met Ala Gly Ile Pro Lys Ala Lys Gln Arg Leu Lys Arg Leu Arg Asn
      450              455              460
Ile His Tyr Leu Phe Asn Thr Ala Leu Phe Leu Ile Ala Trp Arg Leu
465              470              475              480
Leu Ile Ala Arg Ser Gln Met Ala Arg Asn Val Trp Phe Phe Ile Val
      485              490              495
Ser Phe Cys Tyr Lys Phe Leu Ser Tyr Phe Arg Ala Ser Ser Thr Leu
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Lys Val

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&lt;210&gt; 5863

&lt;211&gt; 438

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5863

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438

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&lt;210&gt; 5864

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5864

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Met Gly Glu Lys Asn Lys Gln Leu Gln Ile Arg His Cys Leu Ser Pro
1              5              10              15
Asp Cys Ser Leu Pro Val Gly Gln Thr His Ser Asn Thr Lys Leu Phe
      20              25              30
Cys Gln Tyr Leu Ser Tyr Val Pro Phe Met Ala Glu Tyr Gln Ser Lys

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240
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300
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360
cattctgaga agcttaagac atactttgaa gacaacccta gggacctcca gctgctgcgg
420
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480
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540
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720
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1140

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<210> 5866

<211> 212

<212> PRT

<213> Homo sapiens

<400> 5866

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			20					25					30		
Arg	Ala	Gly	Arg	Thr	Ala	Arg	Ala	Asn	Asn	Pro	Gly	Ile	Val	Leu	Thr
		35					40					45			
Phe	Val	Leu	Pro	Thr	Glu	Gln	Phe	His	Leu	Gly	Lys	Ile	Glu	Glu	Leu
	50					55				60					
Leu	Val	Glu	Arg	Thr	Gly	Ala	Pro	Phe	Cys	Ser	Pro	Thr	Ser	Ser	Gly
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Trp	Arg	Arg	Ser	Arg	Ala	Ser	Ala	Ile	Ala	Ala	Gly	Val	His	Pro	Gln
				85					90					95	
Asp	Ala	Met	Arg	Ser	Val	Thr	Lys	Gln	Ala	Ile	Arg	Glu	Ala	Arg	Leu
		100						105					110		
Lys	Glu	Ile	Lys	Glu	Glu	Leu	Leu	His	Ser	Glu	Lys	Leu	Lys	Thr	Tyr
	115					120					125				
Phe	Glu	Asp	Asn	Pro	Arg	Asp	Leu	Gln	Leu	Leu	Arg	His	Asp	Leu	Pro
	130					135					140				
Leu	His	Pro	Ala	Val	Val	Lys	Pro	His	Leu	Gly	His	Val	Pro	Asp	Tyr
145					150					155					160
Leu	Val	Pro	Pro	Ala	Leu	Arg	Gly	Leu	Val	Arg	Pro	His	Lys	Lys	Arg
				165					170					175	
Lys	Lys	Leu	Ser	Ser	Ser	Cys	Arg	Lys	Ala	Lys	Arg	Ala	Lys	Ser	Gln
		180						185					190		
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<210> 5867

<211> 1882

<212> DNA

<213> Homo sapiens

<400> 5867

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<210> 5868

<211> 131

<212> PRT

<213> Homo sapiens

<400> 5868

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Trp Ile Asn Phe Lys Thr Ser Glu Ala Asn Ser Ala Arg Gly Phe Gln
      35             40             45
Ile Pro Tyr Val Thr Tyr Asp Glu Asp Tyr Glu Gln Leu Val Glu Asp
      50             55             60
Ile Val Arg Asp Gly Arg Leu Tyr Ala Ser Glu Asn His Gln Glu Ile
65             70             75             80
Leu Lys Asp Lys Lys Leu Ile Lys Ala Phe Phe Glu Val Leu Ala His
      85             90             95
Pro Gln Asn Tyr Phe Lys Tyr Thr Glu Lys His Lys Glu Met Leu Pro
      100            105            110
Lys Ser Phe Ile Lys Leu Leu Arg Ser Lys Val Ser Ser Phe Leu Arg
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Pro Tyr Lys
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<210> 5869

<211> 910

<212> DNA

<213> Homo sapiens

<400> 5869

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600

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<210> 5870

<211> 129

<212> PRT

<213> Homo sapiens

<400> 5870

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			20					25					30		
Gly	Ser	Leu	Leu	Ile	Met	His	His	Glu	Ala	Ser	Thr	His	Arg	Val	Ile
		35				40						45			
Pro	Thr	Leu	Val	Gln	Thr	Gly	Leu	His	Gly	Arg	His	Ile	Leu	Gly	Arg
		50				55					60				
His	Val	Phe	Gly	Ser	Ala	Ala	Asn	Leu	Phe	Ser	Cys	Ala	Ile	Asp	Gln
65				70						75				80	
Val	Phe	Pro	Asn	Glu	Gly	Cys	Leu	Pro	Tyr	Ser	Cys	Gln	Glu	Pro	Asn
			85					90						95	
Ser	Ser	Leu	Gln	Tyr	Gln	Ile	Gln	Ser	Val	Val	Arg	Met	Lys	Cys	Gly
		100					105					110			
Gly	Leu	Val	Thr	Glu	Glu	Ala	Val	Glu	Arg	Arg	Arg	Ala	Trp	Val	Ala
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Pro

<210> 5871

<211> 2217

<212> DNA

<213> Homo sapiens

<400> 5871

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<210> 5872

<211> 578

<212> PRT

<213> Homo sapiens

<400> 5872

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Leu	Tyr	Thr	Ser	Ser	Ser	His	His	Ser	His	Ser	Tyr	Ile	Gly	Leu	Pro
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Tyr	Ala	Asp	His	Asn	Tyr	Gly	Ala	Arg	Pro	Pro	Pro	Thr	Pro	Pro	Ala
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Ser	Pro	Pro	Pro	Ser	Val	Leu	Ile	Ser	Lys	Asn	Glu	Val	Gly	Ile	Phe
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Ser Met Glu Asn Ile	Asn Ser Gly Tyr Glu	Thr Arg Arg Lys Lys Gly
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Lys Lys Asp Lys Asp	Ile Ser Lys Glu Lys	Asp Thr Gln Asn Gln Asn
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&lt;210&gt; 5873

&lt;211&gt; 3463

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5873

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&lt;210&gt; 5874



&lt;211&gt; 341

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5874

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Ile Leu Ala Ser Glu Asp Val Glu Gly Gln Glu Ala Ala Thr Leu Pro
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&lt;210&gt; 5875

&lt;211&gt; 5933

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5875

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 5280  
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 5640  
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 5700  
 gaaagtcatt ctaaactgat ttttttttct taaagggtct cttttttcct ggactatgtg  
 5760  
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 5820  
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&lt;210&gt; 5876

&lt;211&gt; 1648

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5876

Leu	Thr	Ile	His	Leu	Pro	Ala	Ala	Val	Leu	Leu	Lys	Glu	Ile	His	Ile
1				5				10						15	
Gln	Pro	His	Leu	Xaa	Phe	Leu	Ala	Thr	Cys	Pro	Ser	Ser	Val	Ser	Val
			20					25					30		
Glu	Val	Ser	Ala	Asp	Gly	Val	Asn	Met	Leu	Pro	Leu	Ser	Thr	Pro	Val
		35				40						45			
Val	Thr	Ser	Gly	Leu	Thr	Tyr	Ile	Lys	Ile	Gln	Leu	Val	Lys	Ala	Glu
	50				55						60				
Val	Ala	Ser	Ala	Val	Cys	Leu	Arg	Leu	His	Arg	Pro	Arg	Asp	Ala	Ser

5048

5049

930	935	940
Pro Ala His Ser Leu	Ala Ala Phe Gly Leu	Phe Leu Arg Leu Pro Gly
945	950	955
Tyr Ala Glu Val Leu	Leu Lys Glu Arg Lys	His Ala Gln Cys Leu Leu
965	970	975
Arg Leu Val Leu Gly	Val Thr Asp Asp Gly	Glu Gly Ser His Ile Leu
980	985	990
Gln Ser Pro Ser Ala	Asn Val Leu Pro Thr	Leu Pro Phe His Val Leu
995	1000	1005
Arg Ser Leu Phe Ser	Thr Thr Pro Leu Thr	Thr Asp Asp Gly Val Leu
1010	1015	1020
Leu Arg Arg Met Ala	Leu Glu Ile Gly Ala	Leu His Leu Ile Leu Val
1025	1030	1035
Cys Leu Ser Ala Leu	Ser His His Ser Pro	Arg Val Pro Asn Ser Ser
1045	1050	1055
Val Asn Gln Thr Glu	Pro Gln Val Ser Ser	Ser His Asn Pro Thr Ser
1060	1065	1070
Thr Glu Glu Gln Gln	Leu Tyr Trp Ala Lys	Gly Thr Gly Phe Gly Thr
1075	1080	1085
Gly Ser Thr Ala Ser	Gly Trp Asp Val Glu	Gln Ala Leu Thr Lys Gln
1090	1095	1100
Arg Leu Glu Glu Glu	His Val Thr Cys Leu	Leu Gln Val Leu Ala Ser
1105	1110	1115
Tyr Ile Asn Pro Val	Ser Ser Ala Val Asn	Gly Glu Ala Gln Ser Ser
1125	1130	1135
His Glu Thr Arg Gly	Gln Asn Ser Asn Ala	Leu Pro Ser Val Leu Leu
1140	1145	1150
Glu Leu Leu Ser Gln	Ser Cys Leu Ile Pro	Ala Met Ser Ser Tyr Leu
1155	1160	1165
Arg Asn Asp Ser Val	Leu Asp Met Ala Arg	His Val Pro Leu Tyr Arg
1170	1175	1180
Ala Leu Leu Glu Leu	Leu Arg Ala Ile Ala	Ser Cys Ala Ala Met Val
1185	1190	1195
Pro Leu Leu Leu Pro	Leu Ser Thr Glu Asn	Gly Glu Glu Glu Glu
1205	1210	1215
Gln Ser Glu Cys Gln	Thr Ser Val Gly Thr	Leu Leu Ala Lys Met Lys
1220	1225	1230
Thr Cys Val Asp Thr	Tyr Thr Asn Arg Leu	Arg Ser Lys Arg Glu Asn
1235	1240	1245
Val Lys Thr Gly Val	Lys Pro Asp Ala Ser	Asp Gln Glu Pro Glu Gly
1250	1255	1260
Leu Thr Leu Leu Val	Pro Asp Ile Gln Lys	Thr Ala Glu Ile Val Tyr
1265	1270	1275
Ala Ala Thr Thr Ser	Leu Arg Arg Ala Asn	Gln Glu Lys Lys Leu Gly
1285	1290	1295
Glu Tyr Ser Lys Lys	Ala Ala Met Lys Pro	Lys Pro Leu Ser Val Leu
1300	1305	1310
Lys Ser Leu Glu Glu	Lys Tyr Val Ala Val	Met Lys Lys Leu Gln Phe
1315	1320	1325
Asp Thr Phe Glu Met	Val Ser Glu Asp Glu	Asp Gly Lys Leu Gly Phe
1330	1335	1340
Lys Val Asn Tyr His	Tyr Met Ser Gln Val	Lys Asn Ala Asn Asp Ala
1345	1350	1355
Asn Ser Ala Ala Arg	Ala Arg Arg Leu Ala	Gln Glu Ala Val Thr Leu



1365 1370 1375  
 Ser Thr Ser Leu Pro Leu Ser Ser Ser Ser Val Phe Val Arg Cys  
 1380 1385 1390  
 Asp Glu Glu Arg Leu Asp Ile Met Lys Val Leu Ile Thr Gly Pro Ala  
 1395 1400 1405  
 Asp Thr Pro Tyr Ala Asn Gly Cys Phe Glu Phe Asp Val Tyr Phe Pro  
 1410 1415 1420  
 Gln Asp Tyr Pro Ser Ser Pro Pro Leu Val Asn Leu Glu Thr Thr Gly  
 1425 1430 1435 1440  
 Gly His Ser Val Arg Phe Asn Pro Asn Leu Tyr Asn Asp Gly Lys Val  
 1445 1450 1455  
 Cys Leu Ser Ile Leu Asn Thr Trp His Gly Arg Pro Glu Glu Lys Trp  
 1460 1465 1470  
 Asn Pro Gln Thr Ser Ser Phe Leu Gln Val Leu Val Ser Val Gln Ser  
 1475 1480 1485  
 Leu Ile Leu Val Ala Glu Pro Tyr Phe Asn Glu Pro Gly Tyr Glu Arg  
 1490 1495 1500  
 Ser Arg Gly Thr Pro Ser Gly Thr Gln Ser Ser Arg Glu Tyr Asp Gly  
 1505 1510 1515 1520  
 Asn Ile Arg Gln Ala Thr Val Lys Trp Ala Met Leu Glu Gln Ile Arg  
 1525 1530 1535  
 Asn Pro Ser Pro Cys Phe Lys Glu Val Ile His Lys His Phe Tyr Leu  
 1540 1545 1550  
 Lys Arg Val Glu Ile Met Ala Gln Cys Glu Glu Trp Ile Ala Asp Ile  
 1555 1560 1565  
 Gln Gln Tyr Ser Ser Asp Lys Arg Val Gly Arg Thr Met Ser His His  
 1570 1575 1580  
 Ala Ala Ala Leu Lys Arg His Thr Ala Gln Leu Arg Glu Glu Leu Leu  
 1585 1590 1595 1600  
 Lys Leu Pro Cys Pro Glu Gly Leu Asp Pro Asp Thr Asp Asp Ala Pro  
 1605 1610 1615  
 Glu Val Cys Arg Ala Thr Thr Gly Ala Glu Glu Thr Leu Met His Asp  
 1620 1625 1630  
 Gln Val Lys Pro Ser Ser Ser Lys Glu Leu Pro Ser Asp Phe Gln Leu  
 1635 1640 1645

&lt;210&gt; 5877

&lt;211&gt; 683

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5877

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ggcagcatga ggtcagtggg gggcttcttg tcccagcggg gcttgcatgg ggaccctctg  
 120

ctactcagg actttcagag gagacgcctg cggggctgca gaaacctcta caagaaggac  
 180

ctctcggcc acttcggctg tgtcaatgcc attgaattct ccaacaatgg aggccagtgg  
 240

ctggtctcag gaggagatga ccgccgggtt ctgctatggc acatggaaca agccatccac  
 300

tccaggggtca agcccatata gctgaaagga gagcaccatt ccaacatttt ttgcctggct  
 360

ttcaacagtg ggaacactaa agtgttctct ggaggcaatg atgagcaagt tatcctccat  
 420  
 gatgttgaaa gcagtgcagac attggacgtg tttgctcatg aagatgcagt atatggcttg  
 480  
 tctgtgagcc cagtgaatga caacattttt gccagttcct cagatgatgg ccgggttctc  
 540  
 atttgggaca ttccgggaatc ccccatgga gagcccttct gctgggcaaa ctatccatca  
 600  
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 683

<210> 5878

<211> 227

<212> PRT

<213> Homo sapiens

<400> 5878

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Ala	Gly	Leu	Gly	Ser	Met	Arg	Ser	Val	Val	Gly	Phe	Leu	Ser	Gln	
		20					25					30			
Arg	Gly	Leu	His	Gly	Asp	Pro	Leu	Thr	Gln	Asp	Phe	Gln	Arg	Arg	
		35					40				45				
Arg	Leu	Arg	Gly	Cys	Arg	Asn	Leu	Tyr	Lys	Lys	Asp	Leu	Leu	Gly	His
	50					55					60				
Phe	Gly	Cys	Val	Asn	Ala	Ile	Glu	Phe	Ser	Asn	Asn	Gly	Gly	Gln	Trp
65				70						75				80	
Leu	Val	Ser	Gly	Gly	Asp	Asp	Arg	Arg	Val	Leu	Leu	Trp	His	Met	Glu
			85						90					95	
Gln	Ala	Ile	His	Ser	Arg	Val	Lys	Pro	Ile	Gln	Leu	Lys	Gly	Glu	His
			100					105					110		
His	Ser	Asn	Ile	Phe	Cys	Leu	Ala	Phe	Asn	Ser	Gly	Asn	Thr	Lys	Val
		115					120					125			
Phe	Ser	Gly	Gly	Asn	Asp	Glu	Gln	Val	Ile	Leu	His	Asp	Val	Glu	Ser
	130					135					140				
Ser	Glu	Thr	Leu	Asp	Val	Phe	Ala	His	Glu	Asp	Ala	Val	Tyr	Gly	Leu
145				150						155				160	
Ser	Val	Ser	Pro	Val	Asn	Asp	Asn	Ile	Phe	Ala	Ser	Ser	Ser	Asp	Asp
			165						170					175	
Gly	Arg	Val	Leu	Ile	Trp	Asp	Ile	Arg	Glu	Ser	Pro	His	Gly	Glu	Pro
		180						185					190		
Phe	Cys	Trp	Ala	Asn	Tyr	Pro	Ser	Ala	Phe	His	Ser	Val	Met	Phe	Asn
		195					200						205		
Pro	Val	Glu	Pro	Arg	Leu	Leu	Ala	Pro	Ala	Asn	Ser	Lys	Glu	Gly	Val
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225															

<210> 5879

<211> 1555

<212> DNA

<213> Homo sapiens

&lt;400&gt; 5879

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120  
tccatttggg gtgctgggga acgttattcc cagagaggtg cctcagtga ggcgctgtgt  
180  
ctcctacgca acttctgagg gctggagggt gccagggca gctgctgacc gcctgggtgt  
240  
tcaggagctg ggtgctgggg aagccacatg cactgcggcg tccagaggca gaagcacaac  
300  
caacaagaac cacgaaggag gcgcctttcc tcctataatg cctgtttggt gccctctact  
360  
gacaaagctt atcccccttc aaaaaacagc caactgaaaa agctgaattt ggaacataaa  
420  
gtcaataaat ccataaccag caatactatg gggcctgggg tgcgctggcc tttagtgtgt  
480  
ggagtggggc gaaggatgct gcatgtcctg cagtgggcac agcgggccctg cacgggggag  
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600  
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720  
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1320  
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1440  
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<210> 5880  
 <211> 185  
 <212> PRT  
 <213> Homo sapiens

<400> 5880  
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 20 25 30  
 Gly Ser Gln Lys Lys Arg Thr Ile Leu Gln Phe Leu Thr Asn Tyr  
 35 40 45  
 Phe Tyr Asp Val Glu Ala Leu Arg Asp Tyr Leu Leu Gln Arg Glu Met  
 50 55 60  
 Tyr Lys Val His Glu Lys Asn Arg Ser Tyr Thr Trp Leu Glu Lys Gln  
 65 70 75 80  
 His Gly Pro Tyr Gly Ala Gly Ala Phe Phe Ile Leu Lys Gln Gly Gly  
 85 90 95  
 Ala Val Lys Phe Arg Asp Lys Glu Trp Ile Arg Pro Asp Lys Tyr Gly  
 100 105 110  
 His Phe Ser Gln Glu Phe Trp Asn Phe Cys Glu Val Pro Val Glu Ala  
 115 120 125  
 Val Asp Ala Gly Asp Cys Asp Ile Asn Tyr Glu Gly Leu Asp Asn Leu  
 130 135 140  
 Arg Thr Ser Ala Gly Trp Thr Ser Arg Thr Ser Leu Pro Cys Pro Thr  
 145 150 155 160  
 Leu Ala Ser Leu Arg Tyr Trp Trp Arg Arg Cys Cys Pro Ile Ala Arg  
 165 170 175  
 Leu Trp Glu Ser Thr Gly Leu Arg Ala  
 180 185

<210> 5881  
 <211> 327  
 <212> DNA  
 <213> Homo sapiens

<400> 5881  
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 180  
 accatccacg tgccgctgga cgcctcgcgc tccaagcagc tcatcagcga gtggaagcag  
 240  
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 300  
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 327

<210> 5882  
 <211> 109  
 <212> PRT

<213> Homo sapiens

<400> 5882

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Xaa Ala Pro Arg Pro Val Ala Arg Glu Lys Thr Ser Leu Gly Ser Leu
 1             5             10             15
Lys Arg Ala Ser Val Asp Val Asp Leu Leu Ala Pro Arg Ser Pro Met
          20             25             30
Ala Lys Glu Asn Met Val Thr Phe Ser His Thr Leu Pro Arg Ala Ser
          35             40             45
Ala Pro Ser Leu Asp Asp Pro Ala Arg Arg His Met Thr Ile His Val
          50             55             60
Pro Leu Asp Ala Ser Arg Ser Lys Gln Leu Ile Ser Glu Trp Lys Gln
65             70             75             80
Lys Ser Leu Glu Gly Arg Gly Leu Gly Leu Pro Asp Asp Ala Ser Pro
          85             90             95
Gly His Leu Arg Ala Pro Ala Glu Pro Met Pro Glu Xaa
          100             105

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<210> 5883

<211> 579

<212> DNA

<213> Homo sapiens

<400> 5883

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120
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180
cagatttgtc gcctctgtcc ccgaagacac ctgcaccctc catgcggagc caagatgggg
240
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480
ggagcgatgg ctgaaggagc tctatgacca tgctgaagcc acgatcgtcg tcatgctcgt
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<210> 5884

<211> 71

<212> PRT

<213> Homo sapiens

<400> 5884

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Leu Ile Gly Glu Ser Gly Val Gly Lys Thr Asn Leu Leu Ser Arg Phe

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180
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240
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300
catcctccgc ggacgcccgc tgccatggcg actctgctgc gccctgtcct ccgtcggctc
360
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420
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480
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540
ctaggggaga ccacaggaca ccgcaccctg aaggtcctca gggaccagat gaggagggat
600
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660
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720
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840
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1080
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1140
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1200

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 1380  
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 1440  
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 gaagtggagg gggaggcgag tgtgtgaata aaggctcca tcagggtcaa aaaaaaaaaa  
 1560  
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 1620  
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 1800  
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 1860  
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 1905

&lt;210&gt; 5886

&lt;211&gt; 265

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5886

Met	Ala	Thr	Leu	Leu	Arg	Pro	Val	Leu	Arg	Arg	Leu	Cys	Gly	Leu	Pro
1				5					10					15	
Gly	Leu	Gln	Arg	Pro	Ala	Ala	Glu	Met	Pro	Leu	Arg	Ala	Arg	Ser	Asp
		20						25					30		
Gly	Ala	Gly	Pro	Leu	Tyr	Ser	His	Leu	Pro	Thr	Ser	Pro	Leu	Gln	
		35					40				45				
Lys	Ala	Leu	Leu	Ala	Ala	Gly	Ser	Ala	Ala	Met	Ala	Leu	Tyr	Asn	Pro
		50				55					60				
Tyr	Arg	His	Asp	Met	Val	Ala	Val	Leu	Gly	Glu	Thr	Thr	Gly	His	Arg
65					70					75				80	
Thr	Leu	Lys	Val	Leu	Arg	Asp	Gln	Met	Arg	Arg	Asp	Pro	Glu	Gly	Ala
			85						90					95	
Gln	Ile	Leu	Gln	Glu	Arg	Pro	Arg	Ile	Ser	Thr	Ser	Thr	Leu	Asp	Leu
		100						105					110		
Gly	Lys	Leu	Gln	Ser	Leu	Pro	Glu	Gly	Ser	Leu	Gly	Arg	Glu	Tyr	Leu
		115				120					125				
Arg	Phe	Leu	Asp	Val	Asn	Arg	Val	Ser	Pro	Asp	Thr	Arg	Ala	Pro	Thr
		130				135					140				
Arg	Phe	Val	Asp	Asp	Glu	Glu	Leu	Ala	Tyr	Val	Ile	Gln	Arg	Tyr	Arg
145					150					155				160	
Glu	Val	His	Asp	Met	Leu	His	Thr	Leu	Leu	Gly	Met	Pro	Thr	Asn	Ile
				165					170					175	
Leu	Gly	Glu	Ile	Val	Val	Lys	Trp	Phe	Glu	Ala	Val	Gln	Thr	Gly	Leu

	180		185		190										
Pro	Met	Cys	Ile	Leu	Gly	Ala	Phe	Phe	Gly	Pro	Ile	Arg	Leu	Gly	Ala
	195						200					205			
Gln	Ser	Leu	Gln	Val	Leu	Val	Ser	Glu	Leu	Ile	Pro	Trp	Ala	Val	Gln
	210					215					220				
Asn	Gly	Arg	Arg	Ala	Pro	Cys	Val	Leu	Asn	Leu	Tyr	Tyr	Glu	Arg	Arg
225					230					235				240	
Trp	Glu	Gln	Ser	Leu	Arg	Ala	Leu	Arg	Glu	Glu	Leu	Gly	Ile	Thr	Ala
			245					250					255		
Pro	Pro	Met	His	Val	Gln	Gly	Leu	Ala							
		260					265								

&lt;210&gt; 5887

&lt;211&gt; 3779

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5887

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&lt;210&gt; 5888

&lt;211&gt; 166

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5888

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 35 40 45  
 Glu Thr Lys His Arg Val Ser Met Glu Val Ala Ala Ala Lys Gly Leu  
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<212> DNA
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&lt;210&gt; 5890

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5890

Ala	Ser	Arg	Pro	Ser	Arg	Ala	Val	Arg	Ala	Gly	Glu	Ala	Gly	Arg	Val
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Leu	Pro	Leu	Val	Ala	Gly	Arg	Asp	Ser	Leu	Ala	Leu	Phe	Pro	Arg	Leu
			20					25					30		
Glu	Cys	Ser	Gly	Thr	Ile	Thr	Ala	His	Cys	Ser	Leu	Asp	Phe	Pro	Gly
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		50				55					60				
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Ala Leu Gly Cys Pro Thr Leu Gly Ala Thr Ala Arg Arg Gly Arg Ser
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Pro Ala Phe His His Leu
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&lt;210&gt; 5891

&lt;211&gt; 1459

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5891

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<210> 5892

<211> 212

<212> PRT

<213> Homo sapiens

<400> 5892

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			20					25					30		
Phe	Arg	Asn	Gly	Ala	Val	Tyr	Gly	Ala	Lys	Ile	Arg	Ala	Pro	His	Ala
		35					40					45			
Leu	Val	Met	Thr	Phe	Leu	Phe	Arg	Asn	Gly	Ser	Leu	Gln	Glu	Lys	Leu
	50					55					60				
Trp	Ala	Ile	Leu	Gln	Ala	Thr	Tyr	Ile	His	Ser	Trp	Asn	Leu	Ala	Arg
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Phe	Val	Phe	Thr	Tyr	Lys	Gly	Leu	Arg	Ala	Leu	Gln	Ser	Tyr	Ile	Gln
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Gly	Lys	Thr	Tyr	Pro	Ala	His	Ala	Phe	Leu	Ala	Ala	Phe	Leu	Gly	Gly
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Ile	Leu	Val	Phe	Gly	Glu	Asn	Asn	Ile	Asn	Ser	Gln	Ile	Asn	Met	
		115				120					125				
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Lys	Gly	Tyr	Ile	Pro	Glu	Pro	Arg	Trp	Asp	Pro	Phe	Pro	Leu	Leu	Thr
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Ala	Val	Val	Trp	Gly	Leu	Val	Leu	Trp	Leu	Phe	Glu	Tyr	His	Arg	Ser
				165					170					175	
Thr	Leu	Gln	Pro	Ser	Leu	Gln	Ser	Ser	Met	Thr	Tyr	Leu	Tyr	Glu	Asp
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Ser	Asn	Val	Trp	His	Asp	Ile	Ser	Asp	Phe	Leu	Val	Tyr	Asn	Lys	Ser
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Arg	Pro	Ser	Asn												
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<210> 5893

<211> 1389

<212> DNA

<213> Homo sapiens

<400> 5893

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&lt;210&gt; 5894

&lt;211&gt; 260

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5894

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 Arg Arg Lys Lys Lys Ala Lys Arg Thr Thr Asn Trp Lys Ile Ile  
                     35                      40                      45  
 Thr Asp Arg Pro Gly Phe His Asp Glu Ser Ala Ile Tyr Pro Val Gly  
                     50                      55                      60  
 Tyr Cys Ser Thr Arg Ile Tyr Ala Ser Met Lys Cys Pro Asp Gln Lys  
 65                      70                      75                      80  
 Cys Leu Tyr Thr Cys Gln Ile Lys Asp Gly Gly Val Gln Pro Gln Phe  
                     85                      90                      95  
 Glu Ile Val Pro Glu Asp Asp Pro Gln Asn Ala Ile Val Ser Ser Ser  
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 Ala Asp Ala Cys His Ala Glu Leu Leu Arg Thr Ile Ser Thr Thr Met  
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 Gly Lys Leu Met Pro Asn Leu Leu Pro Ala Gly Ala Asp Phe Phe Gly  
                     130                      135                      140  
 Phe Ser His Pro Ala Ile His Asn Leu Ile Gln Ser Cys Pro Gly Ala  
 145                      150                      155                      160  
 Arg Lys Cys Ile Asn Tyr Gln Trp Val Lys Phe Asp Val Cys Lys Pro  
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 Gly Asp Gly Gln Leu Pro Glu Gly Leu Pro Glu Asn Asp Ala Ala Met  
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 Ser Phe Glu Ala Phe Gln Arg Gln Ile Phe Asp Glu Asp Gln Asn Asp  
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 Pro Leu Leu Pro Gly Ser Leu Asp Leu Pro Glu Leu Gln Pro Ala Ala  
                     210                      215                      220  
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 225                      230                      235                      240  
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&lt;210&gt; 5895

&lt;211&gt; 2748

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5895

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&lt;210&gt; 5896

&lt;211&gt; 261

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5896

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			20					25					30		
Arg	Asp	Leu	Gly	Gly	Ser	Ser	Ala	Ala	Thr	Glu	Ala	Val	Ala	Ile	Leu
		35					40					45			
Thr	Ala	Thr	Tyr	Pro	Val	Gly	His	Met	Pro	Tyr	Gly	Trp	Leu	Thr	Glu
	50					55					60				
Ile	Arg	Ala	Val	Tyr	Pro	Ala	Phe	Asp	Lys	Asn	Asn	Pro	Ser	Asn	Lys
65					70				75					80	
Leu	Val	Ser	Thr	Ser	Asn	Thr	Val	Thr	Ala	Ala	His	Ile	Lys	Lys	Phe
				85					90					95	
Thr	Phe	Val	Cys	Met	Ala	Leu	Ser	Leu	Thr	Leu	Cys	Phe	Val	Met	Phe
			100					105					110		
Trp	Thr	Pro	Asn	Val	Ser	Glu	Lys	Ile	Leu	Ile	Asp	Ile	Ile	Gly	Val
		115				120					125				
Asp	Phe	Ala	Phe	Ala	Glu	Leu	Cys	Val	Val	Pro	Leu	Arg	Ile	Phe	Ser
	130				135						140				
Phe	Phe	Pro	Val	Pro	Val	Thr	Val	Arg	Ala	His	Leu	Thr	Gly	Trp	Leu
145				150					155					160	
Met	Thr	Leu	Lys	Lys	Thr	Phe	Val	Leu	Ala	Pro	Ser	Ser	Val	Leu	Arg
			165					170						175	
Ile	Ile	Val	Leu	Ile	Ala	Ser	Leu	Val	Val	Leu	Pro	Tyr	Leu	Gly	Val

	180		185		190										
His	Gly	Ala	Thr	Leu	Gly	Val	Gly	Ser	Leu	Leu	Ala	Gly	Phe	Val	Gly
	195				200						205				
Glu	Ser	Thr	Met	Val	Ala	Ile	Ala	Ala	Cys	Tyr	Val	Tyr	Arg	Lys	Gln
	210				215						220				
Lys	Lys	Lys	Met	Glu	Asn	Glu	Ser	Ala	Thr	Glu	Gly	Glu	Asp	Ser	Ala
225					230					235					240
Met	Thr	Asp	Met	Pro	Pro	Thr	Glu	Glu	Val	Thr	Asp	Ile	Val	Glu	Met
			245						250					255	
Arg	Glu	Glu	Asn	Glu											
			260												

&lt;210&gt; 5897

&lt;211&gt; 1930

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5897

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240
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420
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1080

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 1920  
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 1930

&lt;210&gt; 5898

&lt;211&gt; 242

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5898

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Gln	Thr	Pro	Pro	Val	Glu	Glu	Asn	Val	Thr	Gln	Lys	Ile	Ser	Asp	Leu
		20						25					30		
Glu	Ile	Cys	Ala	Asp	Glu	Phe	Pro	Gly	Ser	Ser	Ala	Thr	Tyr	Arg	Ile
	35						40					45			
Leu	Glu	Val	Gly	Cys	Gly	Val	Gly	Asn	Thr	Val	Phe	Pro	Ile	Leu	Gln
	50					55					60				
Thr	Asn	Asn	Asp	Pro	Gly	Leu	Phe	Val	Tyr	Cys	Cys	Asp	Phe	Ser	Ser
65					70				75					80	
Thr	Ala	Ile	Glu	Leu	Val	Gln	Thr	Asn	Ser	Glu	Tyr	Asp	Pro	Ser	Arg
			85					90					95		
Cys	Phe	Ala	Phe	Val	His	Asp	Leu	Cys	Asp	Glu	Glu	Lys	Ser	Tyr	Pro
		100					105					110			
Val	Pro	Lys	Gly	Ser	Leu	Asp	Ile	Ile	Ile	Leu	Ile	Phe	Val	Leu	Ser
	115					120					125				
Ala	Ile	Val	Pro	Asp	Lys	Met	Gln	Lys	Ala	Ile	Asn	Arg	Leu	Ser	Arg

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145	150	155
Asp Met Ala Gln Leu Arg Phe Lys Lys Gly Gln Cys Leu Ser Gly Asn		160
	165	170
Phe Tyr Val Arg Gly Asp Gly Thr Arg Val Tyr Phe Phe Thr Gln Glu		175
	180	185
Glu Leu Asp Thr Leu Phe Thr Thr Ala Gly Leu Glu Lys Val Gln Asn		190
	195	200
Leu Val Asp Arg Arg Leu Gln Val Asn Arg Gly Lys Gln Leu Thr Met		205
	210	215
Tyr Arg Val Trp Ile Gln Cys Lys Tyr Cys Lys Pro Leu Leu Ser Ser		220
225	230	235
Thr Ser		240

&lt;210&gt; 5899

&lt;211&gt; 1589

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5899

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720
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960

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 1589

<210> 5900

<211> 345

<212> PRT

<213> Homo sapiens

<400> 5900

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			20					25					30		
Ile	Pro	Thr	Ile	Ile	Arg	Asp	Glu	Glu	Leu	Lys	Thr	Arg	Gly	Phe	Gly
			35					40					45		
Gly	Ile	Tyr	Gly	Val	Gly	Lys	Ala	Ala	Leu	His	Pro	Pro	Ala	Leu	Ala
			50				55				60				
Val	Leu	Ser	His	Thr	Pro	Asp	Gly	Ala	Thr	Gln	Thr	Ile	Ala	Trp	Val
65						70				75				80	
Gly	Lys	Gly	Ile	Val	Tyr	Asp	Thr	Gly	Gly	Leu	Ser	Ile	Lys	Gly	Lys
			85						90					95	
Thr	Thr	Met	Pro	Gly	Met	Lys	Arg	Asp	Cys	Gly	Gly	Ala	Ala	Ala	Val
			100						105					110	
Leu	Gly	Ala	Phe	Arg	Ala	Ala	Ile	Lys	Gln	Gly	Phe	Lys	Asp	Asn	Leu
			115					120					125		
His	Ala	Val	Phe	Cys	Leu	Ala	Glu	Asn	Ser	Val	Gly	Pro	Asn	Ala	Thr
			130				135					140			
Arg	Pro	Asp	Asp	Ile	His	Leu	Leu	Tyr	Ser	Gly	Lys	Thr	Val	Glu	Ile
145					150					155				160	
Asn	Asn	Thr	Asp	Ala	Glu	Gly	Arg	Leu	Val	Leu	Ala	Asp	Gly	Val	Ser
			165						170					175	
Tyr	Ala	Cys	Lys	Asp	Leu	Gly	Ala	Asp	Ile	Ile	Leu	Asp	Met	Ala	Thr
			180						185					190	
Leu	Thr	Gly	Ala	Gln	Gly	Ile	Ala	Thr	Gly	Lys	Tyr	His	Ala	Ala	Val

195	200	205
Leu Thr Asn Ser Ala Glu Trp Glu Ala Ala Cys Val Lys Ala Gly Arg		
210	215	220
Lys Cys Gly Asp Leu Val His Pro Leu Val Tyr Cys Pro Glu Leu His		
225	230	235
Phe Ser Glu Phe Thr Ser Ala Val Ala Asp Met Lys Asn Ser Val Ala		
245	250	255
Asp Arg Asp Asn Ser Pro Ser Ser Cys Ala Gly Leu Phe Ile Ala Ser		
260	265	270
His Ile Gly Phe Asp Trp Pro Gly Val Trp Val His Leu Asp Ile Ala		
275	280	285
Ala Pro Val His Ala Gly Glu Arg Ala Thr Gly Phe Gly Val Ala Leu		
290	295	300
Leu Leu Ala Leu Phe Gly Arg Ala Ser Glu Asp Pro Leu Leu Asn Leu		
305	310	315
Val Ser Pro Leu Gly Cys Glu Val Asp Val Glu Glu Gly Asp Leu Gly		
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Arg Asp Ser Lys Arg Arg Arg Leu Val		
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&lt;210&gt; 5901

&lt;211&gt; 984

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5901

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240
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840

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<210> 5902

<211> 328

<212> PRT

<213> Homo sapiens

<400> 5902

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Ser	Pro	Arg	Phe	Arg	Ala	Thr	Ile	Asp	Glu	Val	Glu	Thr	Asp	Val	Val
			20					25					30		
Glu	Ile	Glu	Ala	Lys	Leu	Asp	Lys	Leu	Val	Lys	Leu	Cys	Ser	Gly	Met
		35					40					45			
Val	Glu	Ala	Gly	Lys	Ala	Tyr	Val	Ser	Thr	Ser	Arg	Leu	Phe	Val	Ser
	50					55					60				
Gly	Val	Arg	Asp	Leu	Ser	Gln	Gln	Cys	Gln	Gly	Asp	Thr	Val	Ile	Ser
65					70					75				80	
Glu	Cys	Leu	Gln	Arg	Phe	Ala	Asp	Ser	Leu	Gln	Glu	Val	Val	Asn	Tyr
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His	Met	Ile	Leu	Phe	Asp	Gln	Ala	Gln	Arg	Ser	Val	Arg	Gln	Gln	Leu
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Gln	Ser	Phe	Val	Lys	Glu	Asp	Val	Arg	Lys	Phe	Lys	Glu	Thr	Lys	Lys
		115					120					125			
Gln	Phe	Asp	Lys	Val	Arg	Glu	Asp	Leu	Glu	Leu	Ser	Leu	Val	Arg	Asn
	130					135					140				
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Val	Leu	Gln	Ile	Asn	Val	Leu	Gln	Ala	Lys	Lys	Lys	Phe	Glu	Ile	Leu
		180					185						190		
Asp	Ser	Met	Leu	Ser	Phe	Met	His	Ala	Gln	Ser	Ser	Phe	Phe	Gln	Gln
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Gly	Tyr	Ser	Leu	Leu	His	Gln	Leu	Asp	Pro	Tyr	Met	Lys	Lys	Leu	Ala
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			245						250					255	
Ser	Tyr	Asp	Glu	Ser	Lys	Val	Glu	Phe	Asp	Val	Asp	Ala	Pro	Ser	Gly
		260						265				270			
Val	Val	Met	Glu	Gly	Tyr	Leu	Phe	Lys	Arg	Ala	Ser	Asn	Xaa	Phe	Lys
		275					280					285			
Thr	Trp	Asn	Arg	Arg	Trp	Phe	Ser	Ile	Gln	Asn	Ser	Gln	Leu	Val	Tyr
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Gln	Lys	Lys	Leu	Lys	Asp	Ala	Leu	Thr	Val	Val	Val	Asp	Asp	Leu	Arg
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Leu	Cys	Ser	Val	Lys	Pro	Cys	Glu								



325

&lt;210&gt; 5903

&lt;211&gt; 3734

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5903

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&lt;210&gt; 5904

&lt;211&gt; 308

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5904

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Ala	Lys	Phe	Arg	Glu	Asn	Val	Gln	Asp	Val	Leu	Pro	Ala	Leu	Pro	Asn
			20					25					30		
Pro	Asp	Asp	Tyr	Phe	Leu	Leu	Arg	Trp	Leu	Arg	Ala	Arg	Ser	Phe	Asp
		35					40					45			
Leu	Gln	Lys	Ser	Glu	Ala	Met	Leu	Arg	Lys	His	Val	Glu	Phe	Arg	Lys
		50				55					60				
Gln	Lys	Asp	Ile	Asp	Asn	Ile	Ile	Ser	Trp	Gln	Pro	Pro	Glu	Val	Ile
65					70					75				80	
Gln	Gln	Tyr	Leu	Ser	Gly	Gly	Met	Cys	Gly	Tyr	Asp	Leu	Asp	Gly	Cys
			85					90					95		
Pro	Val	Trp	Tyr	Asp	Ile	Ile	Gly	Pro	Leu	Asp	Ala	Lys	Gly	Leu	Leu
			100					105					110		
Leu	Ser	Ala	Ser	Lys	Gln	Asp	Met	Ile	Arg	Lys	Gly	Ile	Lys	Val	Cys
		115					120					125			
Glu	Leu	Leu	Leu	His	Glu	Cys	Glu	Leu	Gln	Thr	Gln	Lys	Leu	Gly	Arg
		130				135					140				
Lys	Ile	Glu	Met	Ala	Leu	Met	Val	Phe	Asp	Met	Glu	Gly	Leu	Ser	Leu
145					150					155				160	
Lys	His	Leu	Trp	Lys	Pro	Ala	Val	Glu	Val	Tyr	Gln	Gln	Phe	Phe	Ser

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Ile Leu Glu Ala Asn Tyr Pro Glu Thr Leu Lys Asn Leu Ile Val Ile
      180              185              190
Arg Ala Pro Lys Leu Phe Pro Met Ala Phe Asn Leu Val Lys Ser Phe
      195              200              205
Met Ser Glu Asp Thr Arg Lys Lys Ile Met Val Leu Gly Ala Asn Trp
      210              215              220
Lys Glu Val Leu Leu Lys His Ile Ser Pro Asp Gln Val Pro Val Glu
      225              230              235              240
Tyr Gly Gly Thr Met Thr Asp Pro Asp Gly Asn Pro Lys Cys Lys Ser
      245              250              255
Lys Ile Asn Tyr Gly Gly Asp Ile Pro Arg Lys Tyr Tyr Val Arg Asp
      260              265              270
Gln Val Lys Gln Gln Tyr Glu His Ser Val Gln Ile Ser Arg Gly Ser
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Ser Gln Gln Val Glu Tyr Glu Ile Leu Phe Pro Gly Cys Val Leu Arg
      290              295              300
Trp Gln Phe Leu
      305

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&lt;210&gt; 5905

&lt;211&gt; 2280

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5905

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&lt;210&gt; 5906

&lt;211&gt; 215

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5906

Glu Ala Ser Gly Leu Arg Phe Asp Phe Ile Pro Asp Val Lys Gly Ala  
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 Val Leu Val Cys Asp Met Ser Ser Asn Phe Leu Ser Lys Pro Val Asp  
 20 25 30  
 Val Ser Lys Phe Arg Val Ile Phe Ala Gly Ala Gln Lys Asn Val Gly  
 35 40 45  
 Ser Ala Gly Val Thr Val Val Ile Val Arg Asp Asp Leu Leu Gly Phe  
 50 55 60  
 Ala Leu Arg Glu Cys Pro Ser Val Leu Glu Tyr Lys Val Gln Ala Gly  
 65 70 75 80  
 Asn Ser Ser Leu Tyr Asn Thr Pro Pro Cys Phe Ser Ile Tyr Val Met  
 85 90 95  
 Gly Leu Val Leu Glu Trp Ile Lys Asn Asn Gly Gly Ala Ala Met  
 100 105 110  
 Glu Lys Leu Ser Ser Ile Lys Ser Leu Thr Ile Tyr Glu Ile Ile Asp  
 115 120 125  
 Asn Ser Gln Gly Phe Tyr Val Cys Pro Val Glu Pro Gln Asn Arg Ser  
 130 135 140  
 Lys Met Asn Ile Pro Phe Arg Ile Gly Asn Ala Lys Gly Asp Asp Ala  
 145 150 155 160  
 Leu Glu Lys Arg Phe Leu Asp Lys Ala Leu Glu Leu Asn Met Leu Ser  
 165 170 175  
 Leu Lys Gly His Arg Ser Val Gly Gly Ile Arg Ala Ser Leu Tyr Asn  
 180 185 190  
 Ala Val Thr Ile Glu Asp Val Gln Lys Leu Ala Ala Phe Met Lys Lys  
 195 200 205  
 Phe Leu Glu Met His Gln Leu  
 210 215

&lt;210&gt; 5907

&lt;211&gt; 1989

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5907

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1980  
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1989

&lt;210&gt; 5908

&lt;211&gt; 454

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5908

```

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Gln Ile Ala Ala Ser Ala Glu Leu Glu Ser Gly Ala Met Pro Trp Ser
      35           40           45
Leu Leu Gln His Ile Asp Glu Arg Asp Arg Ala Gly Leu Leu Pro Ala
      50           55           60
Leu Phe Lys Val Leu Ser Val Gly Arg Gly Gly Ser Pro Arg Leu Gln
      65           70           75           80
Pro Asp Ser Arg Ala Leu His Tyr Met Lys Lys Leu Tyr Lys Thr Tyr
      85           90           95
Ala Thr Lys Glu Gly Ile Pro Lys Ser Asn Arg Ser His Leu Tyr Asn
      100          105          110
Thr Val Arg Leu Phe Thr Pro Cys Thr Arg His Lys Gln Ala Pro Gly
      115          120          125
Asp Gln Val Thr Gly Ile Leu Pro Ser Val Glu Leu Leu Phe Asn Leu
      130          135          140
Asp Arg Ile Thr Thr Val Glu His Leu Leu Lys Ser Val Leu Leu Tyr
      145          150          155          160
Asn Ile Asn Asn Ser Val Ser Phe Ser Ser Ala Val Lys Cys Val Cys
      165          170          175
Asn Leu Met Ile Lys Glu Pro Lys Ser Ser Ser Arg Thr Leu Gly Arg
      180          185          190
Ala Pro Tyr Ser Phe Thr Phe Asn Ser Gln Phe Glu Phe Gly Lys Lys
      195          200          205
His Lys Trp Ile Gln Ile Asp Val Thr Ser Leu Leu Gln Pro Leu Val
      210          215          220
Ala Ser Asn Lys Arg Ser Ile His Met Ser Ile Asn Phe Thr Cys Met
      225          230          235          240
Lys Asp Gln Leu Glu His Pro Ser Ala Gln Asn Gly Leu Phe Asn Met
      245          250          255
Thr Leu Val Ser Pro Ser Leu Ile Leu Tyr Leu Asn Asp Thr Ser Ala
      260          265          270
Gln Ala Tyr His Ser Trp Tyr Ser Leu His Tyr Lys Arg Arg Pro Ser
      275          280          285
Gln Gly Pro Asp Gln Glu Arg Ser Leu Ser Ala Tyr Pro Val Gly Glu
      290          295          300
Glu Ala Ala Glu Asp Gly Arg Ser Ser His His Arg His Arg Arg Gly
      305          310          315          320
Gln Glu Thr Val Ser Ser Glu Leu Lys Lys Pro Leu Gly Pro Ala Ser
      325          330          335
Phe Asn Leu Ser Glu Tyr Phe Arg Gln Phe Leu Leu Pro Gln Asn Glu
      340          345          350
Cys Glu Leu His Asp Phe Arg Leu Ser Phe Ser Gln Leu Lys Trp Asp
      355          360          365
Asn Trp Ile Val Ala Pro His Arg Tyr Asn Pro Arg Tyr Cys Lys Gly
      370          375          380
Asp Cys Pro Arg Ala Val Gly His Arg Tyr Gly Ser Pro Val His Thr
      385          390          395          400
Met Val Gln Asn Ile Ile Tyr Glu Lys Leu Asp Ser Ser Val Pro Arg

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&lt;210&gt; 5910

&lt;211&gt; 899

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5910

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Val Val Ala Ile Lys Lys Met Ser Tyr Ser Gly Lys Gln Thr His Glu
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Glu Val His Lys Lys Pro Leu Gln Glu Val Glu Ile Ala Ala Ile Thr
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His Gly Ala Leu His Gly Leu Ala Tyr Leu His Ser His Ala Leu Ile
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His Arg Asp Ile Lys Ala Gly Asn Ile Leu Leu Thr Glu Pro Gly Gln
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Val Lys Leu Ala Asp Phe Gly Ser Ala Ser Met Ala Ser Pro Ala Asn
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Ser Phe Val Gly Thr Pro Tyr Trp Met Ala Pro Glu Val Ile Leu Ala
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Met Asp Glu Gly Gln Tyr Asp Gly Lys Val Asp Ile Trp Ser Leu Gly
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Ile Thr Cys Ile Glu Leu Ala Glu Arg Lys Pro Pro Leu Phe Asn Met
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Leu Gln Ser Asn Glu Trp Thr Asp Ser Phe Arg Arg Phe Val Asp Tyr
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Cys Leu Gln Lys Ile Pro Gln Glu Arg Pro Thr Ser Ala Glu Leu Leu
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Leu Asn Arg Glu Met Asp Ser Leu Gly Ser Asn His Ser Ile Pro Ser
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Glu Val Met Asp Glu Ser Ser Ser Glu Leu Val Met Met His Asp Asp
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Glu Ser Thr Ile Asn Ser Ser Ser Ser Val Val His Lys Lys Asp His

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Glu Arg Phe Ala Thr Ile Lys Ser Ala Ser Leu Val Thr Arg Gln Ile
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His Glu His Glu Gln Glu Asn Glu Leu Arg Glu Gln Met Ser Gly Tyr
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Lys Leu Lys Ala Glu Met Asp Glu His Arg Leu Lys Leu Gln Lys Glu
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Val Glu Thr His Ala Asn Asn Ser Ser Ile Glu Leu Glu Lys Leu Ala
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Lys Lys Gln Val Ala Ile Ile Glu Lys Glu Ala Lys Val Ala Ala Ala
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Asp Glu Lys Lys Phe Gln Gln Gln Ile Leu Ala Gln Gln Lys Lys Asp
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Leu Thr Thr Phe Leu Glu Ser Gln Lys Lys Gln Tyr Lys Ile Cys Lys
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Glu Lys Ile Lys Glu Glu Met Asn Glu Asp His Ser Thr Pro Lys Lys
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Glu Lys Gln Glu Arg Ile Phe Lys His Lys Glu Asn Leu Gln His Thr
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Gln Ala Glu Glu Glu Ala His Leu Leu Thr Ser Thr Gly Asp Trp Thr
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Thr Thr Lys Asn Cys Arg Phe Phe Lys Arg Lys Ile Met Ile Lys Arg
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625          630          635          640
Thr Met Lys Glu Met Glu His Ala Met Leu Ile Arg His Asp Glu Ser
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Thr Arg Glu Leu Glu Tyr Arg Gln Leu His Thr Leu Gln Lys Leu Arg
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Met Asp Leu Ile Arg Leu Gln His Gln Thr Glu Leu Glu Asn Gln Leu
675          680          685
Glu Tyr Asn Lys Arg Arg Glu Arg Glu Leu His Arg Lys His Val Met
690          695          700
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705          710          715          720
Lys Lys Gln Phe Gln Asp Thr Cys Lys Val Gln Thr Lys Gln Tyr Lys
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Ala Leu Lys Asn His Gln Leu Glu Val Thr Pro Lys Asn Glu His Lys
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Thr Ile Leu Lys Thr Leu Lys Asp Glu Gln Thr Arg Lys Leu Ala Ile
755          760          765
Leu Ala Glu Gln Tyr Glu Gln Ser Ile Asn Glu Met Met Ala Ser Gln
770          775          780
Ala Leu Arg Leu Asp Glu Ala Gln Glu Ala Glu Cys Gln Ala Leu Arg
785          790          795          800
Leu Gln Leu Gln Gln Glu Met Glu Leu Leu Asn Ala Tyr Gln Ser Lys
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Ile Lys Met Gln Thr Glu Ala Gln His Glu Arg Glu Leu Gln Lys Leu

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 850 855 860  
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 <212> DNA  
 <213> Homo sapiens

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 35 40 45  
 Ala Ser Ser Ser Ser Leu Leu Asn Arg Leu Gln Leu Asp Asp Ile

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 Ser Thr Arg Val Glu Phe Asp Leu Pro Glu Tyr Ser Val Arg Arg Arg  
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&lt;210&gt; 5913

&lt;211&gt; 2495

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5913

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<211> 158

<212> PRT

<213> Homo sapiens

<400> 5914

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Gly	Tyr	Ala	Val	His	Asp	Asn	Trp	Ile	Gly	Cys	Asn	Val	Ser	Ser	Tyr
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Pro	Gly	Arg	Asn	Ala	Arg	Glu	Phe	Leu	Gln	Cys	Val	Glu	Lys	Ala	Xaa
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<212> DNA

<213> Homo sapiens

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 Ser Cys Glu Ile Ala Val Thr Arg Lys Val Val Gln Val Tyr Arg Lys  
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 Trp Ile Leu Gln Asp Lys Pro Val Phe Met Glu Glu Pro Asp Arg Lys  
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 Asp Val Ala Gln Glu Asp Ala Glu Lys Leu Gly Phe Ser Glu Thr Asp  
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 Ser Lys Glu Ala Ser Ser Glu Ser Ser Gly His Lys Arg Ser Ser Ser  
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 Trp Gly Arg Thr Tyr Ser Phe Thr Ser Ala Met Ser Arg Gly Cys Val  
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&lt;210&gt; 5918

&lt;211&gt; 981

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5918

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 Arg Thr Met Leu Phe Thr Ile Gly Gln Ser Glu Val Tyr Leu Ile Ser  
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 Pro Asp Thr Lys Lys Ile Ala Leu Glu Lys Asn Phe Lys Glu Ile Ser  
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 Arg Glu Ser Ser Gly Gly Gly Gly Phe His Phe Val Cys Tyr Val Phe  
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 Asp Leu Asp Ser Ser Leu Ser Ser Thr Leu Ser Asn Thr Ser Lys Glu  
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 Lys Leu Leu Gly Ser Ser Glu Asp Leu Ser Ser Asp Ser Glu Ser His

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Gln Pro Ala Arg Gly Ser Pro Gly Val Ser Gln Arg Lys Leu Met Arg
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Arg Arg His Ser Trp Arg Gln Gln Ile Phe Leu Arg Val Ala Thr Pro
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Gln Lys Ala Cys Asp Ser Ser Ser Arg Tyr Glu Asp Tyr Ser Glu Leu
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Pro Phe Gly Pro His Gln Arg Lys Arg Lys Gly His Leu Val Ser Ser
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Glu Ser Cys Gly Lys Gly Leu Phe Phe Asn Arg Tyr Cys Xaa Leu Arg
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Met Glu Lys Glu Asn Gln Lys Leu Gln Ala Ser Glu Asn Asp Leu Leu
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Asn Lys Arg Leu Lys Leu Asp Tyr Glu Glu Ile Thr Pro Cys Leu Lys
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Lys Ile Lys Phe Asp Met Glu Lys Met His Ser Ala Val Gly Gln Gly
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Phe His Leu Lys His Gln Phe Pro Ser Lys Gln Gln Pro Lys Asp Val
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Pro Tyr Lys Glu Leu Leu Lys Gln Leu Thr Ser Gln Gln His Ala Ile
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Gln Leu Gly Ala Gly Gln Leu Ser Leu Tyr Asn Ile Leu Lys Ala Tyr
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Ser Leu Leu Asp Gln Glu Val Gly Tyr Cys Gln Gly Leu Ser Phe Val
          705          710          715          720
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          725          730          735
Leu Lys Phe Leu Met Phe Asp Met Gly Leu Arg Lys Gln Tyr Arg Pro
          740          745          750
Asp Met Ile Ile Leu Gln Ile Gln Met Tyr Gln Leu Ser Arg Leu Leu
          755          760          765
His Asp Tyr His Arg Asp Leu Tyr Asn His Leu Glu Glu His Glu Ile
          770          775          780
Gly Pro Ser Leu Tyr Ala Ala Pro Trp Phe Leu Thr Met Phe Ala Ser
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Gln Phe Pro Leu Gly Phe Val Ala Arg Val Phe Asp Met Ile Phe Leu
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<211> 93

<212> PRT

<213> Homo sapiens

<400> 5920

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Gly	Val	Gly	Pro	Trp	Arg	Gly	Trp	Lys	Thr	Thr	Trp	His	Leu	Gly	Gly
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Leu	Gln	Glu	Arg	Ala	Glu	Arg	Val	Pro	Pro	Arg	Ser	Cys	Glu	Arg	His
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<210> 5921

<211> 4130

<212> DNA

<213> Homo sapiens

<400> 5921

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 300



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&lt;210&gt; 5922

&lt;211&gt; 1252

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5922

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Lys	Ser	Val	Ile	Ile	Trp	Thr	Ser	Lys	Leu	Glu	Gly	Ile	Leu	Lys	Tyr
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Thr	His	Asn	Asp	Ala	Ile	Gln	Cys	Val	Ser	Tyr	Asn	Pro	Ile	Thr	His
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Gln	Leu	Ala	Ser	Cys	Ser	Ser	Ser	Asp	Phe	Gly	Leu	Trp	Ser	Pro	Glu
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Gln	Lys	Ser	Val	Ser	Lys	His	Lys	Ser	Ser	Ser	Lys	Ile	Ile	Cys	Cys
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Ser	Trp	Thr	Asn	Asp	Gly	Gln	Tyr	Leu	Ala	Leu	Gly	Met	Phe	Asn	Gly
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Ile	Ile	Ser	Ile	Arg	Asn	Lys	Asn	Gly	Glu	Glu	Lys	Val	Lys	Ile	Glu
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Gly Thr Val Gly Glu Gln Asn Ser Trp Val Trp Thr Cys Gln Ala Lys		270
	275	280
Pro Asp Ser Asn Tyr Val Val Val Gly Cys Gln Asp Gly Thr Ile Ser		285
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	325	330
Thr Glu Gln Lys Val Arg Ile Lys Cys Lys Glu Leu Val Lys Lys Ile		335
	340	345
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	355	360
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Lys Glu Lys Ile Ile Lys Lys Phe Glu Cys Asn Leu Leu Val Val Cys		385
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	420	425
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	470	475
Ser Ala Ser Arg Lys Lys Leu Ala Val Val Asp Glu Asn Asp Thr Cys		480
	485	490
Leu Val Tyr Asp Ile Asp Thr Lys Glu Leu Leu Phe Gln Glu Pro Asn		495
	500	505
Ala Asn Ser Val Ala Trp Asn Thr Gln Cys Glu Asp Met Leu Cys Phe		510
	515	520
Ser Gly Gly Gly Tyr Leu Asn Ile Lys Ala Ser Thr Phe Pro Val His		525
530	535	540
Arg Gln Lys Leu Gln Gly Phe Val Val Gly Tyr Asn Gly Ser Lys Ile		545
	550	555
Phe Cys Leu His Val Phe Ser Ile Ser Ala Val Glu Val Pro Gln Ser		560
	565	570
Ala Pro Met Tyr Gln Tyr Leu Asp Arg Lys Leu Phe Lys Glu Ala Tyr		575
	580	585
Gln Ile Ala Cys Leu Gly Val Thr Asp Thr Asp Trp Arg Glu Leu Ala		590
	595	600
Met Glu Ala Leu Glu Gly Leu Asp Phe Glu Thr Ala Lys Lys Ala Phe		605
610	615	620
Ile Arg Val Gln Asp Leu Arg Tyr Leu Glu Leu Ile Ser Ser Ile Glu		625
	630	635
Glu Arg Lys Lys Arg Gly Glu Thr Asn Asn Asp Leu Phe Leu Ala Asp		640

5103

1075	1080	1085
Asn Ser Ser Gln Ile Leu Arg Leu Val Glu Thr Lys Asp Ser Ile Gly		
1090	1095	1100
Asp Glu Asp Pro Phe Thr Ala Lys Leu Ser Phe Glu Gln Gly Gly Ser		
1105	1110	1115
Glu Phe Val Pro Val Val Val Ser Arg Leu Val Leu Arg Ser Met Ser		
1125	1130	1135
Arg Arg Asp Val Leu Ile Lys Arg Trp Pro Pro Pro Leu Arg Trp Gln		
1140	1145	1150
Tyr Phe Arg Ser Leu Leu Pro Asp Ala Ser Ile Thr Met Cys Pro Ser		
1155	1160	1165
Cys Phe Gln Val Gly Gly His Pro Gly Ser Ser His Val Leu Leu Leu		
1170	1175	1180
Ala Thr Phe Pro Leu Pro Lys Cys Pro Ser Gly Arg Arg Gly Pro Trp		
1185	1190	1195
Glu Gly Gly Ala His Pro Trp Leu Gln Val Gly Thr Glu Ala Cys Leu		
1205	1210	1215
Ser Ser Pro Leu Leu Ala Phe His Val His Leu Lys Trp Thr Ser Leu		
1220	1225	1230
Ala Pro Ala Leu Ser Thr Ser Ser Pro Asn Pro Gly Gly Pro Ala Ser		
1235	1240	1245
Val Met Cys Pro		
1250		

&lt;210&gt; 5923

&lt;211&gt; 1989

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5923

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720

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 1989

&lt;210&gt; 5924

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5924

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 1 5 10 15  
 Arg Thr Ser Arg His Leu Glu Glu Thr Ile Asn Asn Phe Glu Arg Gln

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      20      25      30
Lys Met Lys Asp Ile Lys Thr Ile Phe Ser Glu Phe Ile Thr Ile Glu
      35      40      45
Met Leu Phe His Gly Lys Ala Leu Glu Val Tyr Thr Ala Ala Tyr Gln
      50      55      60
Asn Ile Gln Asn Ile Asp Glu Asp Glu Asp Leu Glu Val Phe Arg Asn
      65      70      75      80
Ser Leu Tyr Ala Pro Asp Tyr Ser Ser Arg Leu Asp Ile Val Arg Ala
      85      90      95
Asn Ser Lys Ser Pro Leu Gln Arg Ser Leu Ser Ala Lys Cys Val Ser
      100      105      110
Gly Thr Gly Gln Val Ser Thr Cys Arg Leu Arg Lys Asp Gln Gln Ala
      115      120      125
Glu Asp Asp Glu Asp Asp Glu Leu Asp Val Thr Glu Glu Asn Phe
      130      135      140
Leu Lys
145

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&lt;210&gt; 5925

&lt;211&gt; 4538

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5925

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 4538

<210> 5926

<211> 526

<212> PRT

<213> Homo sapiens

<400> 5926

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Ile	Gln	Pro	Thr	Asp	Phe	Gly	Pro	Ser	Glu	Pro	Pro	Leu	Ser	Val	Pro
			20					25					30		
Gln	Pro	Phe	Leu	Pro	Val	Phe	Thr	Met	Pro	Leu	Leu	Ser	Pro	Ser	Pro
		35					40					45			
Ala	Pro	Pro	Pro	Ile	Ser	Pro	Val	Leu	Pro	Leu	Val	Pro	Pro	Pro	Ala
	50					55					60				
Thr	Ala	Leu	Asn	Pro	Pro	Ala	Pro	Pro	Thr	Phe	His	Gln	Pro	Gln	Lys
65					70					75				80	
Phe	Ala	Gly	Val	Asn	Lys	Ala	Pro	Ser	Val	Ile	Thr	His	Thr	Ala	Ser
				85					90					95	
Ala	Thr	Leu	Thr	His	Asp	Ala	Pro	Ala	Thr	Thr	Phe	Ser	Gln	Ser	Gln
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Gly	Leu	Val	Ile	Thr	Thr	His	His	Pro	Ala	Pro	Ser	Ala	Ala	Pro	Cys
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Gly	Leu	Ala	Leu	Ser	Pro	Val	Thr	Arg	Pro	Pro	Gln	Pro	Arg	Leu	Thr
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Phe	Val	His	Pro	Lys	Pro	Val	Ser	Leu	Thr	Gly	Gly	Arg	Pro	Lys	Gln
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Ala	Val	Ile	Met	Thr	Ser	Gly	Pro	Leu	Lys	Arg	Glu	Gly	Met	Leu	Ala
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Ser	Thr	Val	Ser	Gln	Ser	Asn	Val	Val	Ile	Ala	Pro	Ala	Ala	Ile	Ala
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Arg	Ala	Pro	Gly	Val	Pro	Glu	Phe	His	Ser	Ser	Ile	Leu	Val	Thr	Asp
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Leu	Gly	His	Gly	Thr	Ser	Ser	Pro	Pro	Ala	Pro	Val	Ser	Arg	Leu	Phe
				245					250					255	
Pro	Ser	Thr	Ala	Gln	Asp	Pro	Leu	Gly	Lys	Gly	Glu	Gln	Val	Pro	Leu

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 Pro Asn Ser Gly Gln Ala Ser Pro Cys Ala Ser Glu Gln Ser Pro Ser  
 290 295 300  
 Pro Gln Ser Pro Gln Asn Asn Cys Ser Gly Lys Ser Asp Pro Lys Asn  
 305 310 315 320  
 Val Ala Ala Leu Lys Asn Arg Gln Met Lys His Ile Ser Ala Glu Gln  
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 Lys Arg Arg Phe Asn Ile Lys Met Cys Phe Asp Met Leu Asn Ser Leu  
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 Thr Val Glu Tyr Ile Thr Lys Leu Gln Gln Glu Arg Gly Gln Met Gln  
 370 375 380  
 Glu Glu Ala Arg Arg Leu Arg Glu Glu Ile Glu Glu Leu Asn Ala Thr  
 385 390 395 400  
 Ile Ile Ser Cys Gln Gln Leu Leu Pro Ala Thr Gly Val Pro Val Thr  
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 Arg Arg Gln Phe Asp His Met Lys Asp Met Phe Asp Glu Tyr Val Lys  
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 450 455 460  
 Glu Glu Leu His Arg Thr Ala Leu Ser Trp Leu Asp Gln His Cys Ser  
 465 470 475 480  
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 485 490 495  
 Thr Ser Thr Ser Ile Leu Thr Asp Pro Ala Gln Leu Pro Glu Gln Ala  
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&lt;210&gt; 5927

&lt;211&gt; 1786

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5927

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&lt;210&gt; 5928

&lt;211&gt; 202

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5928

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Leu Asp Leu Pro Ser Leu Thr Ser Leu Leu Ser Glu Lys Ala Lys Glu			
	35	40	45
Phe Leu Met Glu Asn Arg Val Gln Ser Phe Tyr Gln Gln Glu Leu Glu			
	50	55	60
Met Val Glu Ser Leu Leu Ser Leu Ala Asn Gln Pro Val Ile His Ser			
65	70	75	80
Ala Cys Ser Asp Gln Val Asn Phe Lys Lys Asp Thr Thr Ser Lys Ala			
	85	90	95
Ile His Ser Ile Phe Lys Asn Ala Ile Gln Leu Leu Gln Glu Lys Gly			
	100	105	110
Leu Val Phe Gln Lys Asp Asp Gly Phe Asp Asn Leu Tyr Tyr Val Thr			
	115	120	125
Arg Glu Asp Lys Asp Leu His Arg Lys Ile His Arg Ile Ile Gln Gln			
	130	135	140
Asp Cys Gln Lys Pro Asn His Met Glu Lys Gly Cys His Phe Leu His			
145	150	155	160
Ile Leu Ala Cys Ala Arg Leu Ser Ile Arg Pro Gly Leu Ser Glu Ala			
	165	170	175
Val Leu Gln Gln Val Leu Glu Leu Leu Glu Asp Gln Ser Asp Ile Val			
	180	185	190
Ser Thr Met Glu His Tyr Tyr Thr Ala Phe			
	195	200	

&lt;210&gt; 5929

&lt;211&gt; 606

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5929

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600
cacgcg
606

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<210> 5930  
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 <212> PRT  
 <213> Homo sapiens

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 Lys Glu Pro Leu Gly Arg Ala Glu Arg Pro Gly Arg Pro Cys Thr Arg  
 35 40 45  
 Leu Gln Pro Ala Gly Ser Val Ser Ser Thr Pro Leu Ser Thr Pro Cys  
 50 55 60  
 Ser Ser Val Pro Ser Ser Pro Ser Phe Ser Pro Thr Glu Gln Lys Thr  
 65 70 75 80  
 His Leu Glu Asp Leu Tyr Trp Met Ala Ser Asn Tyr Gln Gln Met Asn  
 85 90 95  
 Pro Glu Ala Leu Asn Leu Thr Pro Glu Asp Ala Val Glu Ala Leu Ile  
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 Gly Ala His His His His His His His Pro His Pro His His Ala  
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<210> 5931  
 <211> 478  
 <212> DNA  
 <213> Homo sapiens

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 240  
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 360  
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<210> 5932  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 5932

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 20 25 30  
 Glu Arg Met Arg Asn Ser Arg Asp Arg Leu Leu Asn Arg Tyr Arg Gln  
 35 40 45  
 Ala Gly Ser Ser Gly Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln  
 50 55 60  
 Glu Val Met Glu Glu Glu Trp Asn Ala Leu Gln Ser Val Glu Asn Cys  
 65 70 75 80  
 Pro Glu Asp Leu Ala Gln Leu Glu Glu Leu Ile Asp Met Ala Val Leu  
 85 90 95  
 Glu Glu Ile Gln Gln Glu Leu Ile Asn Gln Gly Thr Thr  
 100 105

&lt;210&gt; 5933

&lt;211&gt; 1953

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5933

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 240  
 atgctgcagg cagaggtgac agccttgaag acactggtca tcacgtccac accagcctct  
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 420  
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 960



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 1920  
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 1953

&lt;210&gt; 5934

&lt;211&gt; 314

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5934

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		20					25					30			
Ser	Lys	Val	Arg	Glu	Gln	Leu	Glu	Gln	Glu	Leu	Glu	Glu	Leu	Thr	Ala
		35				40						45			
Ser	Leu	Phe	Glu	Glu	Ala	His	Lys	Met	Val	Arg	Glu	Ala	Asn	Met	Lys
		50				55					60				
Gln	Ala	Ala	Ser	Glu	Lys	Gln	Leu	Lys	Glu	Ala	Arg	Gly	Lys	Ile	Asp
65				70					75				80		
Met	Leu	Gln	Ala	Glu	Val	Thr	Ala	Leu	Lys	Thr	Leu	Val	Ile	Thr	Ser
			85					90					95		
Thr	Pro	Ala	Ser	Pro	Asn	Arg	Glu	Leu	His	Pro	Gln	Leu	Leu	Ser	Pro

	100		105		110										
Thr	Lys	Ala	Gly	Pro	Arg	Lys	Gly	His	Ser	Arg	His	Lys	Ser	Thr	Ser
	115		120		125										
Ser	Thr	Leu	Cys	Pro	Ala	Val	Cys	Pro	Ala	Ala	Gly	His	Thr	Leu	Thr
	130		135		140										
Pro	Asp	Arg	Glu	Gly	Lys	Glu	Val	Asp	Thr	Ile	Leu	Phe	Ala	Glu	Phe
145			150		155									160	
Gln	Ala	Trp	Arg	Glu	Ser	Pro	Thr	Leu	Asp	Lys	Thr	Cys	Pro	Phe	Leu
			165		170									175	
Glu	Arg	Val	Tyr	Arg	Glu	Asp	Val	Gly	Pro	Cys	Leu	Asp	Phe	Thr	Met
	180		185		190										
Gln	Glu	Leu	Ser	Val	Leu	Val	Arg	Ala	Ala	Val	Glu	Asp	Asn	Thr	Leu
	195		200		205										
Thr	Ile	Glu	Pro	Val	Ala	Ser	Gln	Thr	Leu	Pro	Thr	Val	Lys	Val	Ala
	210		215		220										
Glu	Val	Asp	Cys	Ser	Ser	Thr	Asn	Thr	Cys	Ala	Leu	Ser	Gly	Leu	Thr
225			230		235									240	
Arg	Thr	Cys	Arg	His	Arg	Ile	Arg	Leu	Gly	Asp	Ser	Lys	Ser	His	Tyr
			245		250									255	
Tyr	Ile	Ser	Pro	Ser	Ser	Arg	Ala	Arg	Ile	Thr	Ala	Val	Cys	Asn	Phe
	260		265		270										
Phe	Thr	Tyr	Ile	Arg	Tyr	Ile	Gln	Gln	Gly	Leu	Val	Arg	Gln	Asp	Ala
	275		280		285										
Glu	Pro	Met	Phe	Trp	Glu	Ile	Met	Arg	Leu	Arg	Lys	Glu	Met	Ser	Leu
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Ala	Lys	Leu	Gly	Phe	Phe	Pro	Gln	Glu	Ala						
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&lt;210&gt; 5935

&lt;211&gt; 2727

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5935

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 240

ccgccatata aggaacaagt tccagttcca gtctaccacc caacacctag ccgactcgg  
 300

ctagcaactc agctgactga agaggaacaa attaggatag ctcaaagaat aggtcttata  
 360

caacatctgc cttaaaggagt ttatgacctt ggaagagatg gatcagaaaa aaagatccgg  
 420

gagtgtgtga tctgtatgat ggactttggt tatggggacc caattcgatt tctgccgtgc  
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atgcacatct atcacctgga ctgtatagat gactggttga tgagatcctt cacgtgcccc  
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<210> 5936

<211> 154

<212> PRT

<213> Homo sapiens

<400> 5936

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			20					25					30		
Asp	Gln	Glu	Pro	Pro	Pro	Pro	Tyr	Gln	Glu	Gln	Val	Pro	Val	Pro	Val
		35					40					45			
Tyr	His	Pro	Thr	Pro	Ser	Gln	Thr	Arg	Leu	Ala	Thr	Gln	Leu	Thr	Glu
	50					55					60				
Glu	Glu	Gln	Ile	Arg	Ile	Ala	Gln	Arg	Ile	Gly	Leu	Ile	Gln	His	Leu
65				70						75				80	
Pro	Lys	Gly	Val	Tyr	Asp	Pro	Gly	Arg	Asp	Gly	Ser	Glu	Lys	Lys	Ile
			85						90					95	
Arg	Glu	Cys	Val	Ile	Cys	Met	Met	Asp	Phe	Val	Tyr	Gly	Asp	Pro	Ile
		100						105					110		
Arg	Phe	Leu	Pro	Cys	Met	His	Ile	Tyr	His	Leu	Asp	Cys	Ile	Asp	Asp
	115					120					125				
Trp	Leu	Met	Arg	Ser	Phe	Thr	Cys	Pro	Ser	Cys	Met	Glu	Pro	Val	Asp
	130					135					140				
Ala	Ala	Leu	Leu	Ser	Ser	Tyr	Glu	Thr	Asn						
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<210> 5937

<211> 1536

<212> DNA

<213> Homo sapiens

<400> 5937

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780  
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1200  
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1536

&lt;210&gt; 5938

&lt;211&gt; 406

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5938

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Ala Phe Leu Leu Thr Ile Pro Glu Asn Ala Glu Gly His Ile Ile Leu
      20           25           30
Gly Lys Ser Leu Ile Val Pro Phe Lys Gly Ser Arg Val Ile Asp Ser
      35           40           45
Thr Val Leu Pro Gly Ile Leu Ile Glu Met Ser Glu Val Gln Leu Met
      50           55           60
Arg Leu Leu Pro Ile Lys Lys Ser Thr Ala Leu Lys Val Ala Leu Phe
65           70           75           80
Cys Thr Thr Leu Ser Gly Asp Thr Ser Asp Thr Gly Glu Gly Thr Val
      85           90           95
Val Val Ser Tyr Gly Val Ser Leu Glu Asn Ala Val Leu Asp Gln Leu
      100          105          110
Leu Asn Leu Gly Arg Gln Leu Ile Ser Asp His Val Asp Leu Val Leu
      115          120          125
Cys Gln Lys Val Ile His Pro Ser Leu Lys Gln Phe Leu Asn Met His
      130          135          140
Arg Ile Ile Ala Ile Asp Arg Ile Gly Val Thr Leu Met Glu Pro Leu
145          150          155          160
Thr Lys Met Thr Gly Thr Gln Pro Ile Gly Ser Leu Gly Ser Ile Cys
      165          170          175
Pro Asn Ser Tyr Gly Ser Val Lys Asp Val Cys Thr Ala Lys Phe Gly
      180          185          190
Ser Lys His Phe Phe His Leu Ile Pro Asn Glu Ala Thr Ile Cys Ser
      195          200          205
Leu Leu Leu Cys Asn Arg Asn Asp Thr Ala Trp Asp Glu Leu Lys Leu
      210          215          220
Thr Cys Gln Thr Ala Leu His Val Leu Gln Leu Thr Leu Lys Glu Pro
225          230          235          240
Trp Ala Leu Leu Gly Gly Cys Thr Glu Thr His Leu Ala Ala Tyr
      245          250          255
Ile Arg His Lys Thr His Asn Asp Pro Glu Ser Ile Leu Lys Asp Asp
      260          265          270
Glu Cys Thr Gln Thr Glu Leu Gln Leu Ile Ala Glu Ala Phe Cys Ser
      275          280          285
Ala Leu Glu Ser Val Val Gly Ser Leu Glu His Asp Gly Gly Glu Ile
      290          295          300
Leu Thr Asp Met Lys Tyr Gly His Leu Trp Ser Val Gln Ala Asp Ser
305          310          315          320
Pro Cys Val Ala Asn Trp Pro Asp Leu Leu Ser Gln Cys Gly Cys Gly
      325          330          335
Leu Tyr Asn Ser Gln Glu Glu Leu Asn Trp Ser Phe Leu Arg Ser Thr
      340          345          350
Arg Arg Pro Phe Val Pro Gln Ser Cys Leu Pro His Glu Ala Val Gly
      355          360          365
Ser Ala Ser Asn Leu Thr Leu Asp Cys Leu Thr Ala Lys Leu Ser Gly
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Val Ile Glu Asp Lys Asn

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405

&lt;210&gt; 5939

&lt;211&gt; 795

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5939

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&lt;210&gt; 5940

&lt;211&gt; 96

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5940

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Ala Ile Phe Lys Glu Asn Lys Arg Pro Ser Lys Glu Met Gln Val Thr
35          40          45
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50          55          60
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&lt;210&gt; 5941

&lt;211&gt; 2590

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5941

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&lt;210&gt; 5942

&lt;211&gt; 89

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5942

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<212> PRT

<213> Homo sapiens

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<210> 5950

<211> 397

<212> PRT

<213> Homo sapiens

<400> 5950

Met	Pro	Arg	Ala	Ala	Arg	Lys	Ala	Val	Cys	Ala	Glu	Gln	Trp	Met	Phe
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Leu	Thr	Phe	Phe	Lys	Asp	Gly	Tyr	Glu	Gln	Leu	Arg	Gln	Leu	Ser	Gln
			20					25					30		
His	Ala	Met	Lys	Gly	Val	Ile	Arg	Val	Lys	Phe	Val	Asn	Asp	Leu	Gly
		35				40						45			
Val	Asp	Glu	Ala	Gly	Ile	Asp	Gln	Asp	Gly	Val	Phe	Lys	Glu	Phe	Leu
	50					55					60				
Glu	Glu	Ile	Ile	Lys	Arg	Val	Phe	Asp	Pro	Ala	Leu	Asn	Leu	Phe	Lys
65				70					75					80	
Thr	Thr	Ser	Gly	Asp	Glu	Arg	Leu	Tyr	Pro	Ser	Pro	Thr	Ser	Tyr	Ile
			85					90						95	
His	Glu	Asn	Tyr	Leu	Gln	Leu	Phe	Glu	Phe	Val	Gly	Lys	Met	Leu	Gly
			100					105					110		
Lys	Ala	Val	Tyr	Glu	Gly	Ile	Val	Val	Asp	Val	Pro	Phe	Ala	Ser	Phe
		115				120						125			
Phe	Leu	Ser	Gln	Leu	Leu	Gly	His	His	His	Ser	Val	Phe	Tyr	Ser	Ser
	130					135					140				
Val	Asp	Glu	Leu	Pro	Ser	Leu	Asp	Ser	Glu	Phe	Tyr	Lys	Asn	Leu	Thr
145				150					155					160	
Ser	Ile	Lys	Arg	Tyr	Asp	Gly	Asp	Ile	Thr	Asp	Leu	Gly	Leu	Thr	Leu
			165					170						175	
Ser	Tyr	Asp	Glu	Asp	Val	Met	Gly	Gln	Leu	Val	Cys	His	Glu	Leu	Ile
			180					185					190		
Pro	Gly	Gly	Lys	Thr	Ile	Pro	Val	Thr	Asn	Glu	Asn	Lys	Ile	Ser	Tyr
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      210              215              220
Thr Ala Ala Leu Ile Ser Gly Phe Arg Ser Ile Ile Lys Pro Glu Trp
225              230              235              240
Ile Arg Met Phe Ser Thr Pro Glu Leu Gln Arg Leu Ile Ser Gly Asp
      245              250              255
Asn Ala Glu Ile Asp Leu Glu Asp Leu Lys Lys His Thr Val Tyr Tyr
      260              265              270
Gly Gly Phe His Gly Ser His Arg Val Ile Ile Trp Leu Trp Asp Ile
      275              280              285
Leu Ala Ser Asp Phe Thr Pro Asp Glu Arg Ala Met Phe Leu Lys Phe
      290              295              300
Val Thr Ser Cys Ser Arg Pro Pro Leu Leu Gly Phe Ala Tyr Leu Lys
305              310              315              320
Pro Pro Phe Ser Ile Arg Cys Val Glu Val Ser Asp Asp Gln Asp Thr
      325              330              335
Gly Asp Thr Leu Gly Ser Val Leu Arg Gly Phe Phe Thr Ile Arg Lys
      340              345              350
Arg Glu Pro Gly Gly Arg Leu Pro Thr Ser Ser Thr Cys Phe Asn Leu
      355              360              365
Leu Lys Leu Pro Asn Tyr Ser Lys Lys Ser Val Leu Arg Glu Lys Leu
      370              375              380
Arg Tyr Ala Ile Ser Met Asn Thr Gly Phe Glu Leu Ser
385              390              395

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&lt;210&gt; 5951

&lt;211&gt; 1724

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5951

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180
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660
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720

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 960  
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 1320  
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 1380  
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 1724

&lt;210&gt; 5952

&lt;211&gt; 378

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5952

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Gly	Arg	Pro	Ala	Leu	Arg	Leu	Gly	Ser	Ser	Leu	Ala	Gly	Leu	Gly	Gly
			20					25					30		
Ala	Pro	Arg	Phe	Pro	Pro	Gly	Gly	Phe	Ala	Ala	Gly	Arg	Thr	Met	Leu
			35				40					45			
Leu	Lys	Glu	Tyr	Arg	Ile	Cys	Met	Pro	Leu	Thr	Val	Asp	Glu	Tyr	Lys
			50			55					60				
Ile	Gly	Gln	Leu	Tyr	Met	Ile	Ser	Lys	His	Ser	His	Glu	Gln	Ser	Asp
65				70				75					80		
Arg	Gly	Glu	Gly	Val	Glu	Val	Val	Gln	Asn	Glu	Pro	Phe	Glu	Asp	Pro
				85				90					95		
His	His	Gly	Asn	Gly	Gln	Phe	Thr	Glu	Lys	Arg	Val	Tyr	Leu	Asn	Ser

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 Lys Leu Pro Ser Trp Ala Arg Ala Val Val Pro Lys Ile Phe Tyr Val  
 115 120 125  
 Thr Glu Lys Ala Trp Asn Tyr Tyr Pro Tyr Thr Ile Thr Glu Tyr Thr  
 130 135 140  
 Cys Ser Phe Leu Pro Lys Phe Ser Ile His Ile Glu Thr Lys Tyr Glu  
 145 150 155 160  
 Asp Asn Lys Gly Ser Asn Asp Thr Ile Phe Asp Asn Glu Ala Lys Asp  
 165 170 175  
 Val Glu Arg Glu Val Cys Phe Ile Asp Ile Ala Cys Asp Glu Ile Pro  
 180 185 190  
 Glu Arg Tyr Tyr Lys Glu Ser Glu Asp Pro Lys His Phe Lys Ser Glu  
 195 200 205  
 Lys Thr Gly Arg Gly Gln Leu Arg Glu Gly Trp Arg Asp Ser His Gln  
 210 215 220  
 Pro Ile Met Cys Ser Tyr Lys Leu Val Thr Val Lys Phe Glu Val Trp  
 225 230 235 240  
 Gly Leu Gln Thr Arg Val Glu Gln Phe Val His Lys Val Val Arg Asp  
 245 250 255  
 Ile Leu Leu Ile Gly His Arg Gln Ala Phe Ala Trp Val Asp Glu Trp  
 260 265 270  
 Tyr Asp Met Thr Met Asp Glu Val Arg Glu Phe Glu Arg Ala Thr Gln  
 275 280 285  
 Glu Ala Thr Asn Lys Lys Ile Gly Ile Phe Pro Pro Ala Ile Ser Ile  
 290 295 300  
 Ser Ser Ile Pro Leu Leu Pro Ser Ser Val Arg Ser Ala Pro Ser Ser  
 305 310 315 320  
 Ala Pro Ser Thr Pro Leu Ser Thr Asp Ala Pro Glu Phe Leu Ser Val  
 325 330 335  
 Pro Lys Asp Arg Pro Arg Lys Lys Ser Ala Pro Glu Thr Leu Thr Leu  
 340 345 350  
 Pro Asp Pro Glu Lys Lys Ala Thr Leu Asn Leu Pro Gly Met His Ser  
 355 360 365  
 Ser Asp Lys Pro Cys Arg Pro Lys Ser Glu  
 370 375

&lt;210&gt; 5953

&lt;211&gt; 777

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5953

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 120  
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 180  
 aacagctttc tagttcaaga ggtgatggaa gaagagtgga atgctttgca gtcagtggag  
 240  
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 300  
 attcaacagg agctgatcaa ccaagagcag tccatcatca gcgagtatga gaagagcttg  
 360

cagtttgatg aaaagtgtct cagcatcatg ctggctgagt gggaggcaaa cccactcatc  
 420  
 tgtcctgtat gtacaaagcc tgtgatactt gggtgtgat cctctagagc cagcttggac  
 480  
 tcacatcatt ctatgggggt gaagacaact cattccctct gaggagcctt gtacatacaa  
 540  
 gccttttatt tataacttat tttgtattga aactttttaa caatactgaa gaaaaaaaaa  
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 660  
 agacaaactg ccttgaggga gataaaccaa ttttatgtct atcatgttat acaaaaatct  
 720  
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 777

<210> 5954

<211> 152

<212> PRT

<213> Homo sapiens

<400> 5954

Phe	Arg	His	Glu	Ala	Arg	Ser	Arg	Lys	Arg	Ser	Pro	Arg	Arg	Ser	Leu
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Tyr	Lys	Leu	Val	Gly	Ser	Pro	Pro	Trp	Lys	Glu	Ala	Phe	Arg	Gln	Arg
			20					25					30		
Cys	Leu	Glu	Arg	Met	Arg	Asn	Ser	Arg	Asp	Arg	Leu	Leu	Asn	Arg	Tyr
		35					40					45			
Arg	Gln	Leu	Xaa	Ser	Ser	Gly	Pro	Gly	Asn	Ser	Gln	Asn	Ser	Phe	Leu
		50				55					60				
Val	Gln	Glu	Val	Met	Glu	Glu	Glu	Trp	Asn	Ala	Leu	Gln	Ser	Val	Glu
65					70				75					80	
Asn	Cys	Pro	Glu	Asp	Leu	Ala	Gln	Leu	Glu	Glu	Leu	Ile	Asp	Met	Ala
			85						90					95	
Val	Leu	Glu	Glu	Ile	Gln	Gln	Glu	Leu	Ile	Asn	Gln	Glu	Gln	Ser	Ile
			100					105					110		
Ile	Ser	Glu	Tyr	Glu	Lys	Ser	Leu	Gln	Phe	Asp	Glu	Lys	Cys	Leu	Ser
		115					120					125			
Ile	Met	Leu	Ala	Glu	Trp	Glu	Ala	Asn	Pro	Leu	Ile	Cys	Pro	Val	Cys
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Thr	Lys	Pro	Val	Ile	Leu	Gly	Leu								
145						150									

<210> 5955

<211> 1459

<212> DNA

<213> Homo sapiens

<400> 5955

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 180

tacccttccc cccatattac catacatatg cacggcggga ccagcagcga cggtagcagc  
 240  
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 360  
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 420  
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 480  
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 540  
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 600  
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 660  
 gagagtggct gcggcggctg gggccatatg atgggtgatg aggggttcagc cctctctgct  
 720  
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 780  
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 1200  
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 1320  
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 1440  
 aaaaaaaaaa aagtcgacg  
 1459

&lt;210&gt; 5956

&lt;211&gt; 431

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5956

Xaa	Asn	Trp	Thr	Ala	Leu	Ser	Asn	Thr	Cys	Ala	Met	Tyr	Ile	Leu	Ser
1					5				10				15		
Ala	Pro	Ala	Ser	Arg	Tyr	Pro	Gly	Gly	Leu	Met	Ser	Glu	Phe	Ser	Pro

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      20      25      30
Arg Phe Lys Ala Leu Pro Pro Gly Ala Gln Pro Val Ile Cys Ile His
      35      40      45
Ser Ala Cys Thr Trp Ala Asp Leu Ser Val Cys Tyr Pro Ser Pro
      50      55      60
His Ile Thr Ile His Met His Gly Gly Thr Ser Ser Asp Gly Ser Ser
      65      70      75      80
Ser Met Ala Ala Ile Tyr Gly Gly Val Glu Gly Gly Gly Thr Arg Ser
      85      90      95
Glu Val Leu Leu Val Ser Glu Asp Gly Lys Ile Leu Ala Glu Ala Asp
      100      105      110
Gly Leu Ser Thr Asn His Trp Leu Ile Gly Thr Asp Lys Cys Val Glu
      115      120      125
Arg Ile Asn Glu Met Val Asn Arg Ala Lys Arg Lys Ala Gly Val Asp
      130      135      140
Pro Leu Val Pro Leu Arg Ser Leu Gly Leu Ser Leu Ser Gly Gly Asp
      145      150      155      160
Gln Glu Asp Ala Gly Arg Ile Leu Ile Glu Glu Leu Arg Asp Arg Phe
      165      170      175
Pro Tyr Leu Ser Glu Ser Tyr Leu Ile Thr Thr Asp Ala Ala Gly Ser
      180      185      190
Ile Ala Thr Ala Thr Pro Asp Gly Gly Val Val Leu Ile Ser Gly Thr
      195      200      205
Gly Ser Asn Cys Arg Leu Ile Asn Pro Asp Gly Ser Glu Ser Gly Cys
      210      215      220
Gly Gly Trp Gly His Met Met Gly Asp Glu Gly Ser Ala Leu Ser Ala
      225      230      235      240
Pro Ser Ala Tyr Trp Ile Ala His Gln Ala Val Lys Ile Val Phe Asp
      245      250      255
Ser Ile Asp Asn Leu Glu Ala Ala Pro His Asp Ile Gly Tyr Val Lys
      260      265      270
Gln Ala Met Phe His Tyr Phe Gln Val Pro Asp Arg Leu Gly Ile Leu
      275      280      285
Thr His Leu Tyr Arg Asp Phe Asp Lys Cys Arg Phe Ala Gly Phe Cys
      290      295      300
Arg Lys Ile Ala Glu Gly Ala Gln Gln Gly Asp Pro Leu Ser Arg Tyr
      305      310      315      320
Ile Phe Arg Lys Ala Gly Glu Met Leu Gly Arg His Ile Val Ala Val
      325      330      335
Leu Pro Glu Ile Asp Pro Val Leu Phe Gln Gly Lys Ile Gly Leu Pro
      340      345      350
Ile Leu Cys Val Gly Ser Val Trp Lys Ser Trp Glu Leu Leu Lys Glu
      355      360      365
Gly Phe Leu Leu Ala Leu Thr Gln Gly Arg Glu Ile Gln Ala Gln Asn
      370      375      380
Phe Phe Ser Ser Phe Thr Leu Met Lys Leu Arg His Ser Ser Ala Leu
      385      390      395      400
Gly Gly Ala Ser Leu Gly Ala Arg His Ile Gly His Leu Leu Pro Met
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Asp Tyr Ser Ala Asn Ala Ile Ala Phe Tyr Ser Tyr Thr Phe Ser
      420      425      430

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&lt;210&gt; 5957

&lt;211&gt; 855

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5957

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 540  
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 660  
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 720  
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 840  
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 855

&lt;210&gt; 5958

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5958

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 Gly Ser Pro Pro Trp Lys Glu Ala Phe Arg Gln Arg Cys Leu Glu Arg  
 20 25 30  
 Met Arg Asn Ser Arg Asp Arg Leu Leu Asn Arg Tyr Arg Gln Ala Gly  
 35 40 45  
 Ser Ser Gly Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln Glu Val  
 50 55 60  
 Met Glu Glu Glu Trp Asn Ala Leu Gln Ser Val Glu Asn Cys Pro Glu  
 65 70 75 80  
 Asp Leu Ala Gln Leu Glu Glu Leu Ile Asp Met Ala Val Leu Glu Glu  
 85 90 95  
 Ile Gln Gln Glu Leu Ile Asn Gln Gly Leu



100

105

<210> 5959  
 <211> 830  
 <212> DNA  
 <213> Homo sapiens

<400> 5959  
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 360  
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 420  
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 480  
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 540  
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 600  
 gattgggctg acaatgtttt ctttctacaa cttcaacagg ctgcactgga ggtgtttgca  
 660  
 gagaataata ctctgagtaa attgcagcta ggacagctag cctctatgga gagctctgtc  
 720  
 tttgatgaca tgattaacct cttagaacgt ttaaagcatg atatgttgac ccgtcaagta  
 780  
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<210> 5960  
 <211> 251  
 <212> PRT  
 <213> Homo sapiens

<400> 5960  
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 20 25 30  
 Glu Arg Glu Leu His Ser Val His Gly Tyr Pro Gly Thr Phe Ala Asn  
 35 40 45  
 Cys Met His Ile Leu Ser Glu Glu Thr Cys Phe Gln Arg Trp Val Thr  
 50 55 60  
 Gly Glu Arg Lys Phe Ala Leu Gln Lys Met Asp Ser Met Leu Ser Ser  
 65 70 75 80  
 Glu Ala Ala Trp Val Ser Gln Tyr Lys Asp Ile Thr Asp Val Asp Glu

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<210> 5962
<211> 114
<212> PRT
<213> Homo sapiens
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&lt;400&gt; 5962

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Met Cys Gly Asp Met Gln Glu Gly Thr Pro Arg Cys Ala Tyr Thr Ala
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Leu Leu Pro Pro Gly Pro Thr Leu His Arg Asp Thr Arg Arg Glu Ser
          20           25           30
Leu Ser His Ser His Gln Pro Gly Leu Ser Gly Glu Gly Ala Gln Glu
          35           40           45
Gln Ala Arg Ile Asp Thr Gly Ile His Met Lys Arg Met Gln Thr Pro
          50           55           60
Arg His Pro Ala Leu Ser Gln Ser Leu Ile Lys Phe Gly Ile Leu Phe
65           70           75           80
Asp Pro Ser Ile Phe Phe Leu Glu Thr Gly Ser Arg Phe Ile Ala Gln
          85           90           95
Ala Glu Cys Ser Gly Tyr Ser Gln Ala Pro Leu Glu Arg Thr Ala Ala
          100          105          110
Pro Ser

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&lt;210&gt; 5963

&lt;211&gt; 1288

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5963

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60
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120
gaagaaaaag tgaaacgatc tgtgaaagat gctgccaaaga agggccagaa ggatgtctgc
180
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240
aaagcacaca tgaactcagt gctcatgggg atgaagaacc agctcgcggt cttgcgagtg
300
gctgggtccc tgcagaagag cacagaagtg atgaaggcca tgcaaagtct tgtgaagatt
360
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420
gaggagatgt tagaggacac ttttgaaagc atggacgatc aggaagaaat ggaggaagaa
480
gcagaaatgg aaattgacag aattctcttt gaaattacag caggggcctt gggcaaagca
540
cccagtaaag tgactgatgc cttccagag ccagaacctc caggagcgat ggctgcctca
600
gaggatgagg aggaggagga agaggctctg gaggccatgc agtcccggct ggccacactc
660
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720
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780
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tggcataaat aaatgcatca ttttaggag tatagacaga tatatcttat tgtggggagg
900

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 960  
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 1020  
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 1260  
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 1288

<210> 5964

<211> 222

<212> PRT

<213> Homo sapiens

<400> 5964

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			20				25					30			
Gln	Ile	Arg	Asp	Ile	Gln	Arg	Glu	Glu	Glu	Lys	Val	Lys	Arg	Ser	Val
		35				40					45				
Lys	Asp	Ala	Ala	Lys	Lys	Gly	Gln	Lys	Asp	Val	Cys	Ile	Val	Leu	Ala
	50					55				60					
Lys	Glu	Met	Ile	Arg	Ser	Arg	Lys	Ala	Val	Ser	Lys	Leu	Tyr	Ala	Ser
65				70				75				80			
Lys	Ala	His	Met	Asn	Ser	Val	Leu	Met	Gly	Met	Lys	Asn	Gln	Leu	Ala
			85					90				95			
Val	Leu	Arg	Val	Ala	Gly	Ser	Leu	Gln	Lys	Ser	Thr	Glu	Val	Met	Lys
			100					105				110			
Ala	Met	Gln	Ser	Leu	Val	Lys	Ile	Pro	Glu	Ile	Gln	Ala	Thr	Met	Arg
		115				120					125				
Glu	Leu	Ser	Lys	Glu	Met	Met	Lys	Ala	Gly	Ile	Ile	Glu	Glu	Met	Leu
	130					135					140				
Glu	Asp	Thr	Phe	Glu	Ser	Met	Asp	Asp	Gln	Glu	Glu	Met	Glu	Glu	Glu
145				150				155						160	
Ala	Glu	Met	Glu	Ile	Asp	Arg	Ile	Leu	Phe	Glu	Ile	Thr	Ala	Gly	Ala
			165					170				175			
Leu	Gly	Lys	Ala	Pro	Ser	Lys	Val	Thr	Asp	Ala	Leu	Pro	Glu	Pro	Glu
			180					185				190			
Pro	Pro	Gly	Ala	Met	Ala	Ala	Ser	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Glu
		195				200					205				
Ala	Leu	Glu	Ala	Met	Gln	Ser	Arg	Leu	Ala	Thr	Leu	Arg	Ser		
	210					215					220				

<210> 5965

<211> 1011

<212> DNA

<213> Homo sapiens

&lt;400&gt; 5965

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 120  
 agatgcctgg agagaatgag aaacagccgg gacaggctcc taaacaggta ccgccaggct  
 180  
 ggaagcagtg ggccagggaa ttctcagaac agctttctag ttcaagaggt gatggaagaa  
 240  
 gagtggaatg ctttgcagnn tcagtgggag aattgtccag aagacttggc tcagttggag  
 300  
 gagctgatag acatggctgt gctggaggaa attcaacagg agctgatcaa ccaagagcag  
 360  
 tccatcatca gcgagtatga gaagagcttg cagtttgatg aaaagtgtct cagcatcatg  
 420  
 ctggctgagt gggaggcaaa cccactcatc tgtcctgtat gtacaaagta caacctgaga  
 480  
 atcacaagcg gtgtgggtgt gtgtcagtgt ggctgtcca tcccatctca ttcttctgag  
 540  
 ttgacagagc agaagcttcg tgctgttta gagggtagta taaatgagca cagtgcacat  
 600  
 tgtccccaca cacctgaatt ttcagtcact ggaggaacag aagaaaagtc cagtcttctc  
 660  
 atgagctgtc tggcctgtga tacttgggct gtgatcctct agagccagct tggactcaca  
 720  
 tcattctatg gggttgaaga caactcattc cctctgagga gccttgtaga tacaagcctt  
 780  
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 840  
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 900  
 aactgccttg gaggagataa accaatttta tgtctatcat gttatacaaa aatctagaaa  
 960  
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 1011

&lt;210&gt; 5966

&lt;211&gt; 233

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5966

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 Ser Leu Arg Ser Pro Arg Arg Ser Leu Tyr Lys Leu Val Gly Ser Pro  
 20 25 30  
 Pro Trp Lys Glu Ala Phe Arg Gln Arg Cys Leu Glu Arg Met Arg Asn  
 35 40 45  
 Ser Arg Asp Arg Leu Leu Asn Arg Tyr Arg Gln Ala Gly Ser Ser Gly  
 50 55 60  
 Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln Glu Val Met Glu Glu  
 65 70 75 80  
 Glu Trp Asn Ala Leu Gln Xaa Gln Trp Xaa Asn Cys Pro Glu Asp Leu

	85		90		95										
Ala	Gln	Leu	Glu	Leu	Ile	Asp	Met	Ala	Val	Leu	Glu	Glu	Ile	Gln	
		100					105					110			
Gln	Glu	Leu	Ile	Asn	Gln	Glu	Gln	Ser	Ile	Ile	Ser	Glu	Tyr	Glu	Lys
		115					120					125			
Ser	Leu	Gln	Phe	Asp	Glu	Lys	Cys	Leu	Ser	Ile	Met	Leu	Ala	Glu	Trp
		130					135				140				
Glu	Ala	Asn	Pro	Leu	Ile	Cys	Pro	Val	Cys	Thr	Lys	Tyr	Asn	Leu	Arg
145					150					155				160	
Ile	Thr	Ser	Gly	Val	Val	Val	Cys	Gln	Cys	Gly	Leu	Ser	Ile	Pro	Ser
			165						170				175		
His	Ser	Ser	Glu	Leu	Thr	Glu	Gln	Lys	Leu	Arg	Ala	Cys	Leu	Glu	Gly
			180					185					190		
Ser	Ile	Asn	Glu	His	Ser	Ala	His	Cys	Pro	His	Thr	Pro	Glu	Phe	Ser
		195					200					205			
Val	Thr	Gly	Gly	Thr	Glu	Glu	Lys	Ser	Ser	Leu	Leu	Met	Ser	Cys	Leu
		210					215				220				
Ala	Cys	Asp	Thr	Trp	Ala	Val	Ile	Leu							
225						230									

&lt;210&gt; 5967

&lt;211&gt; 1806

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5967

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120  
tgtgcttttg ttgctaggca gtcaacagca gggctactaa agcacttcta atttagacaa  
180  
atcttttctc ctattttaga aatggatttc aatgggtgttc agtttgtttg cagaaaccta  
240  
ctgaaagtga gcatgttttt gaacacatta acaccgaagt tctacgtggc cctaacaggc  
300  
acttcctcac taatatcagg gcttattttg atatttgaat ggtggtattt tcgcaaatac  
360  
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420  
gacaacaact ctccaacaa ttctaattcc agtaacgggg actcagattc caataggcaa  
480  
agtgtctcag aatgcaaagt atggcgaaat ccactaaatt tatttagggg tgctgaatac  
540  
aatcggtata ctgggtgac aggacgagag cctcttactt actatgacat gaatctctct  
600  
gcccaagacc accagacatt ctttacttgt gactcggacc atctgcgtcc cgcagatgca  
660  
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720  
gccttgagaa taaatgagac gagacaccaa tgtcttggtg tacatcaaaa gaaggctagc  
780  
aatgtgtgcc agaagactcg ggaggaccag ggaagcaaag cccttctgga actacaagca  
840

tatgctgatg ttcaggcagt cttagcaaag tatgatgata taagcttacc aaagtcagca  
 900  
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 1020  
 agagctgtgg aattcaatcc tcatgtgcca aaatacctac tagaaatgaa aagcttaatc  
 1080  
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 1140  
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 1260  
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 1380  
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 1440  
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 1500  
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 1560  
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 1620  
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 1680  
 tgcaggaggt ccaaaaggat ggaatgattt aggaaatcct agcaaataa aatgtgtggg  
 1740  
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 1800  
 ctttcc  
 1806

<210> 5968

<211> 434

<212> PRT

<213> Homo sapiens

<400> 5968

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Ser	Met	Phe	Leu	Asn	Thr	Leu	Thr	Pro	Lys	Phe	Tyr	Val	Ala	Leu	Thr
			20					25					30		
Gly	Thr	Ser	Ser	Leu	Ile	Ser	Gly	Leu	Ile	Leu	Ile	Phe	Glu	Trp	Trp
			35				40					45			
Tyr	Phe	Arg	Lys	Tyr	Gly	Thr	Ser	Phe	Ile	Glu	Gln	Val	Ser	Val	Ser
			50			55				60					
His	Leu	Arg	Pro	Leu	Leu	Gly	Gly	Val	Asp	Asn	Asn	Ser	Ser	Asn	Asn
65				70				75						80	
Ser	Asn	Ser	Ser	Asn	Gly	Asp	Ser	Asp	Ser	Asn	Arg	Gln	Ser	Val	Ser
			85					90					95		
Glu	Cys	Lys	Val	Trp	Arg	Asn	Pro	Leu	Asn	Leu	Phe	Arg	Gly	Ala	Glu

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<210> 5969
<211> 429
<212> DNA
<213> Homo sapiens
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5146



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 240  
 cactaccaca atagccggga caggcggcgc aacccccggc ggttccagta cagggtccacg  
 300  
 ccctgccccca gcgtgaagca cggggatgag tggggggaac cctcacgctg cgatggcggc  
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 429

<210> 5970

<211> 143

<212> PRT

<213> Homo sapiens

<400> 5970

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Gln	Asn	Gly	Gln	Leu	Gly	Gly	Gly	Glu	Gly	Val	Pro	Asp	Leu	Gln	Pro
		20					25					30			
Gly	Val	Leu	Ala	Ser	Gln	Ala	Met	Ile	Glu	Lys	Ile	Leu	Ser	Glu	Asp
	35					40					45				
Pro	Arg	Trp	Gln	Asp	Ala	Asn	Phe	Val	Leu	Gly	Ser	Tyr	Lys	Thr	Glu
	50					55				60					
Gln	Cys	Pro	Lys	Pro	Pro	Arg	Leu	Cys	Arg	Gln	Gly	Tyr	Ala	Cys	Pro
65				70				75					80		
His	Tyr	His	Asn	Ser	Arg	Asp	Arg	Arg	Arg	Asn	Pro	Arg	Arg	Phe	Gln
			85				90						95		
Tyr	Arg	Ser	Thr	Pro	Cys	Pro	Ser	Val	Lys	His	Gly	Asp	Glu	Trp	Gly
		100					105					110			
Glu	Pro	Ser	Arg	Cys	Asp	Gly	Gly	Asp	Gly	Cys	Gln	Tyr	Cys	His	Ser
	115					120					125				
Arg	Thr	Glu	Gln	Gln	Phe	His	Pro	Glu	Ile	Tyr	Lys	Ser	Thr	Lys	
	130					135					140				

<210> 5971

<211> 565

<212> DNA

<213> Homo sapiens

<400> 5971

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 120  
 catgtccctt aggtcagcta agccacatc agtgtccaaa taggcaacat ccctatttta  
 180  
 tagatgggtca tccccatttt agagatagct cccttttata tccccatttt acaggtgaag  
 240  
 gaattgaggc acagaagggt aggtcacttc tgcaagatga ccagctgaac caaaatttca  
 300

gggcttcaaa caccaaagt gttcctttgt cttccgtttc ccacttgctt cccagaggct  
 360  
 cagcaagtag cctctggcca ctgagcatcc tcccgccac tttgtccct gcctcctgat  
 420  
 cccaggactg tggccgtgga tgccagagcg aggatgtgaa tcctgttggg ttctgaagcc  
 480  
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 565

<210> 5972

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5972

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Cys	Pro	Asn	Arg	Gln	His	Pro	Tyr	Phe	Ile	Asp	Gly	His	Pro	His	Phe
		20						25					30		
Arg	Asp	Ser	Ser	Leu	Leu	Tyr	Pro	His	Phe	Thr	Gly	Glu	Gly	Ile	Glu
		35				40						45			
Ala	Gln	Lys	Val	Arg	Ser	Leu	Leu	Gln	Asp	Asp	Gln	Leu	Asn	Gln	Asn
	50					55					60				
Phe	Arg	Ala	Ser	Asn	Thr	Lys	Cys	Val	Pro	Leu	Ser	Ser	Val	Ser	His
65				70						75				80	
Leu	Leu	Pro	Arg	Gly	Ser	Ala	Ser	Ser	Leu	Trp	Pro	Leu	Ser	Ile	Leu
				85					90					95	
Pro	Pro	Thr	Leu	Leu	Pro	Ala	Ser								
				100											

<210> 5973

<211> 797

<212> DNA

<213> Homo sapiens

<400> 5973

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 120  
 aacgagcctt cgaatcatgg acgcgcgggc ccagctcctc ctccgagttc ctcacccggg  
 180  
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 240  
 cacatccggg accctcatgc ctgggaggag gagggggggc cttcattcg ggaccctgc  
 300  
 actccgtcgc cggaagtgcc accgagaagc gccggcctcg gggctgtcta cagcggcccc  
 360  
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 420  
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 480

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 797

<210> 5974

<211> 107

<212> PRT

<213> Homo sapiens

<400> 5974

Met	Glu	Gly	Ser	Gly	Thr	Gly	Lys	Arg	Arg	Gly	Lys	Ala	Ala	Lys	Thr
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Ser	Leu	Arg	Ile	Met	Asp	Ala	Arg	Ala	Gln	Leu	Leu	Leu	Arg	Val	Pro
			20					25					30		
His	Pro	Gly	Pro	Ser	Leu	Thr	Ser	Gly	Ala	Leu	Thr	His	Ile	Arg	Asp
		35					40					45			
Pro	His	Pro	Gly	Leu	Ser	Pro	Thr	Ser	Gly	Thr	Leu	Met	Pro	Gly	Arg
		50				55					60				
Arg	Arg	Gly	Gly	Pro	Ser	Phe	Gly	Thr	Pro	Ala	Leu	Arg	Arg	Arg	Lys
65					70					75				80	
Cys	His	Arg	Glu	Ala	Pro	Ala	Ser	Gly	Leu	Ser	Thr	Ala	Ala	Arg	Glu
			85					90						95	
Arg	Leu	Trp	Trp	Pro	Arg	Ala	Arg	Val	Cys	Arg					
			100					105							

<210> 5975

<211> 2175

<212> DNA

<213> Homo sapiens

<400> 5975

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 120  
 cagagggcca cgtacaagta tgagatgatt aacaagcaga atgagcagat gcatgcgctg  
 180  
 ctggccattg ccctcacgat gtaccccatg cgtatcgatg agagcattca cctccagctg  
 240  
 cgggagaaat atggggacaa gatgttgccg atgtcttata ccgctgatga ttatgagtct  
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 360  
 aagcaggacc ttgcttatga acgtcagtat gaacagcaaa cctatcaggt gatccctgag  
 420

gtgatcaaaa acttcatcca gtatttccac aaaactgtct cagatttgat tgaccagaaa  
480  
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<210> 5976

<211> 564

<212> PRT

<213> Homo sapiens

<400> 5976

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			20					25					30		
Asp	Leu	Ala	Tyr	Glu	Arg	Gln	Tyr	Glu	Gln	Gln	Thr	Tyr	Gln	Val	Ile
		35					40					45			
Pro	Glu	Val	Ile	Lys	Asn	Phe	Ile	Gln	Tyr	Phe	His	Lys	Thr	Val	Ser
	50					55					60				
Asp	Leu	Ile	Asp	Gln	Lys	Val	Tyr	Glu	Leu	Gln	Ala	Ser	Arg	Val	Ser
65					70					75				80	
Ser	Asp	Val	Ile	Asp	Gln	Lys	Val	Tyr	Glu	Ile	Gln	Asp	Ile	Tyr	Glu
				85					90					95	
Asn	Ser	Trp	Thr	Lys	Leu	Thr	Glu	Arg	Phe	Phe	Lys	Asn	Thr	Pro	Trp
			100					105					110		
Pro	Glu	Ala	Glu	Ala	Ile	Ala	Pro	Gln	Val	Gly	Asn	Asp	Ala	Val	Phe
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Leu	Ile	Leu	Tyr	Lys	Glu	Leu	Tyr	Tyr	Arg	His	Ile	Tyr	Ala	Lys	Val
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Cys	Asn	Leu	Phe	Asn	Tyr	Ile	Leu	Asn	Ala	Asp	Gly	Pro	Ala	Pro	Leu
			165					170						175	
Glu	Leu	Pro	Asn	Gln	Trp	Leu	Trp	Asp	Ile	Ile	Asp	Glu	Phe	Ile	Tyr
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Gln	Phe	Gln	Ser	Phe	Ser	Gln	Tyr	Arg	Cys	Lys	Thr	Ala	Lys	Lys	Ser
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Ala	Gly	Glu	Tyr	Gly	Arg	His	Ser	Leu	Tyr	Lys	Met	Leu	Gly	Tyr	Phe
		260						265					270		
Ser	Leu	Val	Gly	Leu	Leu	Arg	Leu	His	Ser	Leu	Leu	Gly	Asp	Tyr	Tyr
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Gln	Ala	Ile	Lys	Val	Leu	Glu	Asn	Ile	Glu	Leu	Asn	Lys	Lys	Ser	Met
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Tyr	Ser	Arg	Val	Pro	Glu	Cys	Gln	Val	Thr	Thr	Tyr	Tyr	Tyr	Val	Gly
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Phe	Ala	Tyr	Leu	Met	Met	Arg	Arg	Tyr	Gln	Asp	Ala	Ile	Arg	Val	Phe

325 330 335  
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 Thr Thr Tyr Lys Tyr Glu Met Ile Asn Lys Gln Asn Glu Gln Met His  
 355 360 365  
 Ala Leu Leu Ala Ile Ala Leu Thr Met Tyr Pro Met Arg Ile Asp Glu  
 370 375 380  
 Ser Ile His Leu Gln Leu Arg Glu Lys Tyr Gly Asp Lys Met Leu Arg  
 385 390 395 400  
 Met Gln Lys Gly Asp Pro Gln Val Tyr Glu Glu Leu Phe Ser Tyr Ser  
 405 410 415  
 Cys Pro Lys Phe Leu Ser Pro Val Val Pro Asn Tyr Asp Asn Val His  
 420 425 430  
 Pro Asn Tyr His Lys Glu Pro Phe Leu Gln Gln Leu Lys Val Phe Ser  
 435 440 445  
 Asp Glu Val Gln Gln Gln Ala Gln Leu Ser Thr Ile Arg Ser Phe Leu  
 450 455 460  
 Lys Leu Tyr Thr Thr Met Pro Val Ala Lys Leu Ala Gly Phe Leu Asp  
 465 470 475 480  
 Leu Thr Glu Gln Glu Phe Arg Ile Gln Leu Leu Val Phe Lys His Lys  
 485 490 495  
 Met Lys Asn Leu Val Trp Thr Ser Gly Ile Ser Ala Leu Asp Gly Glu  
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 Phe Gln Ser Ala Ser Glu Val Asp Phe Tyr Ile Asp Lys Asp Met Ile  
 515 520 525  
 His Ile Ala Asp Thr Lys Val Ala Arg Arg Tyr Gly Asp Phe Phe Ile  
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 Arg Gln Ile His Lys Phe Glu Glu Leu Asn Arg Thr Leu Lys Lys Met  
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&lt;210&gt; 5977

&lt;211&gt; 2320

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5977

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 420  
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720  
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<210> 5978

<211> 77

<212> PRT

<213> Homo sapiens

<400> 5978

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Ile	Arg	Leu	Gly	Ser	Val	Ala	His	Ala	Cys	Asp	Pro	Ser	Thr	Leu	Gly
		20						25					30		
Gly	Arg	Gly	Gly	Gln	Ile	Ile	Xaa	Ala	Arg	Ser	Ser	Arg	Pro	Ala	Trp
		35				40						45			
Thr	Thr	Trp	Arg	Xaa	Val	Phe	Thr	Lys	Asn	Thr	Lys	Ile	Ser	Trp	Ala
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<210> 5979

<211> 1095

<212> DNA

<213> Homo sapiens

<400> 5979

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 660



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<210> 5980

<211> 169

<212> PRT

<213> Homo sapiens

<400> 5980

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			20					25				30			
Ser	Gly	Gln	Glu	Asp	Tyr	Asp	Arg	Leu	Arg	Pro	Leu	Ser	Tyr	Gln	Asn
		35					40				45				
Thr	His	Leu	Val	Leu	Ile	Cys	Tyr	Asp	Val	Met	Asn	Pro	Thr	Ser	Tyr
	50					55					60				
Asp	Asn	Val	Leu	Ile	Lys	Trp	Phe	Pro	Glu	Val	Thr	His	Phe	Cys	Arg
65					70					75				80	
Gly	Ile	Pro	Met	Val	Leu	Ile	Gly	Cys	Lys	Thr	Asp	Leu	Arg	Lys	Asp
				85					90					95	
Lys	Glu	Gln	Leu	Arg	Lys	Leu	Arg	Ala	Ala	Gln	Leu	Glu	Pro	Ile	Thr
		100						105					110		
Tyr	Met	Gln	Gly	Leu	Ser	Ala	Cys	Glu	Gln	Ile	Arg	Ala	Ala	Leu	Tyr
		115					120					125			
Leu	Glu	Cys	Ser	Ala	Lys	Phe	Arg	Glu	Asn	Val	Glu	Asp	Val	Phe	Arg
	130					135					140				
Glu	Ala	Ala	Lys	Val	Ala	Leu	Ser	Ala	Leu	Lys	Lys	Ala	Gln	Arg	Gln
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Lys	Lys	Arg	Arg	Leu	Cys	Leu	Leu	Leu							
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<210> 5981

<211> 677

<212> DNA

<213> Homo sapiens

<400> 5981

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 240  
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 420  
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 677

<210> 5982

<211> 98

<212> PRT

<213> Homo sapiens

<400> 5982

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Arg	Ile	Pro	Lys	Ser	Asp	Asp	Gly	Thr	Arg	Thr	Gly	Arg	Asn	Asp	Ser
			20					25					30		
Pro	Arg	Ala	Pro	Leu	Pro	Arg	Ser	Ser	Ala	Arg	Arg	Pro	Ser	Lys	Ala
		35					40					45			
Asn	Leu	His	Thr	Leu	Gly	Gln	Leu	Lys	Leu	Ser	Arg	Arg	Cys	Arg	Glu
	50					55				60					
Pro	Arg	Leu	Gly	Arg	Ala	Gly	Gln	Gln	Arg	Leu	His	Pro	Arg	Thr	Arg
65					70				75					80	
Pro	Arg	Arg	Gly	Ser	Gly	Pro	Leu	Val	Arg	Ala	Gly	Arg	Arg	Gly	Trp
			85					90						95	

Gly Lys

<210> 5983

<211> 790

<212> DNA

<213> Homo sapiens

<400> 5983

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 120

cattgttttc cttaaattac tggtaaattt tgaaataaac agtcccaaga tgtgattatt  
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 790

&lt;210&gt; 5984

&lt;211&gt; 186

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5984

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Leu	Gln	Glu	Ile	Lys	Thr	Ile	Gly	Tyr	Thr	Ser	Pro	Arg	Ser	Arg	Thr
			20					25					30		
Glu	Val	Asn	Arg	Gln	Cys	Pro	Gly	Glu	Lys	Glu	Pro	Val	Ser	Asp	Leu
	35						40					45			
Gln	Leu	Gly	Leu	Asp	Ala	Val	Glu	Pro	Thr	Ala	Leu	His	Lys	Thr	Leu
	50					55					60				
Glu	Thr	Pro	Ala	His	Asp	Arg	Ala	Glu	Pro	Asn	Ser	Gln	Leu	Asp	Ser
65					70					75				80	
Thr	His	Ser	Gly	Arg	Gly	Thr	Met	Tyr	Ser	Ser	Trp	Val	Lys	Ser	Pro
			85					90					95		
Asp	Arg	Thr	Gly	Val	Asn	Phe	Ser	Val	Asn	Ser	Asn	Leu	Arg	Asp	Leu
		100						105					110		
Thr	Pro	Ser	His	Gln	Leu	Glu	Val	Gly	Gly	Gly	Phe	Arg	Ile	Ser	Glu
	115						120					125			
Ser	Lys	Cys	Leu	Met	Gln	Asp	Asp	Thr	Arg	Gly	Met	Phe	Met	Glu	Thr
	130					135					140				
Thr	Val	Phe	Cys	Thr	Ser	Glu	Asp	Gly	Leu	Val	Ser	Gly	Phe	Gly	Arg
145					150					155				160	
Thr	Val	Asn	Asp	Asn	Leu	Ile	Asp	Gly	Asn	Cys	Thr	Pro	Gln	Asn	Pro
				165					170					175	
Pro	Gln	Lys	Lys	Lys	Val	Ser	Leu	Leu	Glu						

180

185

&lt;210&gt; 5985

&lt;211&gt; 737

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5985

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&lt;210&gt; 5986

&lt;211&gt; 165

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5986

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Glu Thr Leu Glu Gln Arg Leu Leu Val Thr Glu Leu Met Arg Leu Leu					
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Gly Pro Ser Gln Glu Arg Glu Ile Pro Pro Leu Leu Gly Leu Glu Lys					
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Leu Glu Pro Asn Lys					
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&lt;210&gt; 5987

&lt;211&gt; 1444

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5987

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<212> PRT

<213> Homo sapiens

<400> 5988

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<213> Homo sapiens

<400> 5989

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 <213> Homo sapiens

<400> 5990

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Lys Thr Gly Tyr Ser Ala Thr Val Ile Phe His Thr Lys Pro Phe Tyr
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Pro Val Tyr Pro Lys Lys Ile Arg Pro Leu Glu Lys Gln Gly Pro Met
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Glu Ser Arg Asn Leu Trp Arg Glu Val Thr Arg Tyr Leu Arg Leu Gly
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Asp Ile Asp Ala Ala Thr Glu Gln Lys Arg His Leu Glu Glu Lys Gln
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<400> 5991

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&lt;210&gt; 5992

&lt;211&gt; 301

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5992

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&lt;210&gt; 5993

&lt;211&gt; 7858

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5993

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<210> 6000

<211> 757

<212> PRT

<213> Homo sapiens

<400> 6000

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Asp	Trp	Arg	Gln	Ser	Ile	Asn	Thr	Ile	Glu	Ser	Leu	Lys	Asp	Val	Lys
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Asp	Ala	Val	Val	Gln	His	Ser	Gln	Leu	Ala	Ala	Ala	Val	Glu	Asn	Leu
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Lys	Asn	Ile	Phe	Ser	Val	Pro	Glu	Ile	Val	Arg	Glu	Thr	Gln	Asp	Leu
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Glu	Gly	Thr	Gln	Ala	Asp	Thr	Arg	Glu	Ser	Asp	Lys	Met	Trp	Leu	Val

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Ala Lys Asn Leu Met Val	Gln Cys Phe Pro Pro	His Tyr Glu Ile Phe
305	310	315
Lys Asn Leu Leu Asn Met	Tyr His Gln Ala Leu	Ser Thr Arg Met Gln
325	330	335
Asp Leu Ala Ser Glu Asp	Leu Glu Ala Asn Glu	Ile Val Ser Leu Leu
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Thr Trp Val Leu Asn Thr	Tyr Thr Ser Thr Glu	Met Met Arg Asn Val
355	360	365
Glu Leu Ala Pro Glu Val	Asp Val Gly Thr Leu	Glu Pro Leu Leu Ser
370	375	380
Pro His Val Val Ser Glu	Leu Leu Asp Thr Tyr	Met Ser Thr Leu Thr
385	390	395
Ser Asn Ile Ile Ala Trp	Leu Arg Lys Ala Leu	Glu Thr Asp Lys Lys
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Asp Trp Val Lys Glu Thr	Glu Pro Glu Ala Asp	Gln Asp Gly Tyr Tyr
420	425	430
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Gln Val Ala Ala Gln Ile	Ser Glu Asp Leu Lys	Thr Lys Val Leu Val
450	455	460
Leu Cys Leu Gln Gln Met	Asn Ser Phe Leu Ser	Arg Tyr Lys Asp Glu
465	470	475
Ala Gln Leu Tyr Lys Glu	Glu His Leu Arg Asn	Arg Gln His Pro His
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Cys Tyr Val Gln Tyr Met	Ile Ala Ile Ile Asn	Asn Cys Gln Thr Phe
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Lys Glu Ser Ile Val Ser	Leu Lys Arg Lys Tyr	Leu Lys Asn Glu Val
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Gly Ser Asn Ala Val Asp	Ile Ile Cys Val Thr	Val Glu Asp Tyr Phe
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Asn Asp Phe Ala Lys Ile	Lys Lys Pro Tyr Lys	Lys Arg Met Thr Ala
595	600	605
Glu Ala His Arg Arg Val	Val Val Glu Tyr Leu	Arg Ala Val Met Gln
610	615	620
Lys Arg Ile Ser Phe Arg	Ser Pro Glu Glu Arg	Lys Glu Gly Ala Glu
625	630	635
Lys Met Val Arg Glu Ala	Glu Gln Arg Arg Phe	Leu Phe Arg Lys Leu
645	650	655
Ala Ser Gly Phe Gly Glu	Asp Val Asp Gly Tyr	Cys Asp Thr Ile Val
660	665	670
Ala Val Ala Glu Val Ile	Lys Leu Thr Asp Pro	Ser Leu Leu Tyr Leu
675	680	685
Glu Val Ser Thr Leu Val	Ser Lys Tyr Pro Asp	Ile Arg Asp Asp His
690	695	700
Ile Gly Ala Leu Leu Ala	Val Arg Gly Asp Ala	Ser Arg Asp Met Lys

705		710		715		720
Gln Thr Ile Met Glu Thr Leu Glu Gln Gly Pro Ala Gln Ala Ser Pro						
	725		730		735	
Ser Tyr Val Pro Leu Phe Lys Asp Ile Val Val Pro Ser Leu Asn Val						
	740		745		750	
Ala Lys Leu Leu Lys						
755						

&lt;210&gt; 6001

&lt;211&gt; 2490

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6001

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&lt;210&gt; 6002

&lt;211&gt; 263

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6002

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15

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Gly Asn His Ser Tyr Cys Arg Asn Pro Asp Glu Asp Pro Ala Gly Pro
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Trp Cys Tyr Val Ser Gly Glu Ala Gly Val Pro Glu Lys Arg Pro Cys
      85      90      95
Glu Asp Leu Arg Cys Pro Glu Thr Thr Ser Gln Ala Leu Pro Ala Phe
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Thr Thr Glu Ile Gln Glu Ala Ser Glu Gly Pro Gly Ala Asp Glu Val
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Ala Val Gln Pro Val Ile Gly Ile Ser Gln Arg Val Arg Met Asn Ser
      145      150      155      160
Lys Glu Lys Lys Asp Leu Gly Thr Leu Gly Tyr Val Leu Gly Ile Thr
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Met Met Val Ile Ile Ile Ala Ile Gly Ala Gly Ile Ile Leu Gly Tyr
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Ser Tyr Lys Arg Gly Lys Asp Leu Lys Glu Gln His Asp Gln Lys Val
      195      200      205
Cys Glu Arg Glu Met Gln Arg Ile Thr Leu Pro Leu Ser Ala Phe Thr
      210      215      220
Asn Pro Thr Cys Glu Ile Val Asp Glu Lys Thr Val Val Val His Thr
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Ser Gln Thr Pro Val Asp Pro Gln Glu Gly Thr Thr Pro Leu Met Gly
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Gln Ala Gly Thr Pro Gly Ala
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&lt;210&gt; 6003

&lt;211&gt; 3107

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6003

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&lt;210&gt; 6004

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6004

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			20					25					30		
Pro	Ala	Val	Pro	Lys	Val	Ala	Pro	Gly	Thr	Met	Pro	Thr	Arg	Pro	Glu
			35				40						45		
Gly	Gly	Thr	Glu	Thr	Thr	Ser	Met	Leu	Xaa	Val	Pro	Gly	Val	Thr	Gln
			50			55				60					
Ser	Pro	Arg	Gly	Glu	Arg	Gly	Ser	Gly	Pro	His	Ala	Val	Gln	Gly	Val
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Ala	Leu	Pro	Xaa	Arg	Gly	Ser	Pro	Arg	Gly	Pro	Gly	Pro	Arg	Ala	Pro
				85				90					95		
Gly	Arg	Gly	Arg	Asp	Cys	Gly	Gly	Asn	Gly	Pro	Ala	Glu	Ala	Pro	Ala

	100		105		110									
Pro	Leu	Ser	Ala	Phe	Gln	Pro	Pro	Ala	Leu	Gly	Pro	Ala	Pro	Lys
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Glu	Gly	Gly	Pro	Ser	Ser	Leu	Asn	Lys	Arg	Cys	Thr			
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<210> 6005  
 <211> 1735  
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 <213> Homo sapiens

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<210> 6006

<211> 200

<212> PRT

<213> Homo sapiens

<400> 6006

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		20					25					30			
Gly	Glu	Ala	Gly	Glu	Met	Gly	Leu	Ser	Gly	Leu	Pro	Gly	Ala	Asp	Gly
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		100				105						110			
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		165				170						175			
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<210> 6007

<211> 693

<212> DNA

<213> Homo sapiens

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 693

&lt;210&gt; 6008

&lt;211&gt; 214

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6008

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Asp	Leu	His	Lys	Leu	Val	Asp	Asn	Trp	Ala	Arg	Asp	Ala	Met	Asn	Leu
		85					90						95		
Ser	Gly	Arg	Arg	Gly	Ser	Lys	Gly	His	Met	Asn	Tyr	Glu	Gly	Pro	Gly
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Met	Ala	Arg	Lys	Phe	Ser	Ala	Pro	Gly	Gln	Leu	Cys	Ile	Ser	Met	Thr
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Ser	Asn	Leu	Gly	Gly	Ser	Ala	Pro	Ile	Ser	Ala	Ala	Ser	Ala	Thr	Ser
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Leu	Gly	His	Phe	Thr	Lys	Ser	Met	Cys	Pro	Pro	Gln	Gln	Tyr	Gly	Phe
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	165		170		175										
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&lt;210&gt; 6009

&lt;211&gt; 1570

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6009

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<212> PRT

<213> Homo sapiens

<400> 6010

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	50					55					60				
Ile	Leu	Leu	Leu	Glu	Ala	Gly	Pro	Lys	Lys	Val	Leu	Glu	Lys	Leu	Ser
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Glu	Thr	Tyr	Ser	Asn	Arg	Val	Ser	Ser	Ile	Ser	Pro	Gly	Ser	Ala	Thr
			85					90					95		
Leu	Leu	Ser	Ser	Phe	Gly	Ala	Trp	Asp	His	Ile	Cys	Asn	Met	Arg	Tyr
		100						105				110			
Arg	Ala	Phe	Arg	Arg	Met	Gln	Val	Trp	Asp	Ala	Cys	Ser	Glu	Ala	Leu
		115				120					125				
Ile	Met	Phe	Asp	Lys	Asp	Asn	Leu	Asp	Asp	Met	Gly	Tyr	Ile	Val	Glu
	130					135				140					
Asn	Asp	Val	Ile	Met	His	Ala	Leu	Thr	Lys	Gln	Leu	Glu	Ala	Val	Ser
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Asp	Arg	Val	Thr	Val	Leu	Tyr	Arg	Ser	Lys	Ala	Ile	Arg	Tyr	Thr	Trp
			165					170					175		
Pro	Cys	Pro	Phe	Pro	Met	Ala	Asp	Ser	Ser	Pro	Trp	Val	His	Ile	Thr
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 Asp Phe Ile Asp Thr Ala Gly Ala Met Leu Gln Tyr Pro Val Ser Leu  
 305 310 315 320  
 Leu Lys Pro Thr Lys Val Ser Ala Arg Gln Leu Pro Pro Ser Val Pro  
 325 330 335  
 Trp Val Asp Ala Lys Ser Arg Val Leu Phe Pro Leu Gly Leu Gly His  
 340 345 350  
 Ala Ala Glu Tyr Val Arg Pro Arg Val Ala Leu Ile Gly Asp Ala Ala  
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 His Arg Val His Pro Leu Ala Gly Gln Gly Val Asn Met Gly Phe Gly  
 370 375 380  
 Asp Ile Ser Ser Leu Ala His His Leu Ser Thr Ala Ala Phe Asn Gly  
 385 390 395 400  
 Lys Asp Leu Gly Ser Val Ser His Leu Thr Gly Tyr Glu Thr Glu Arg  
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&lt;210&gt; 6011

&lt;211&gt; 1331

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6011

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&lt;210&gt; 6012

&lt;211&gt; 219

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6012

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Val	Val	Lys	Val	Leu	Leu	Asp	Cys	Gly	Ala	Asp	Pro	Asp	Ser	Arg	Asp
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&lt;211&gt; 2204

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6013

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&lt;210&gt; 6014

&lt;211&gt; 182

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6014

Arg	Gln	His	Asn	Lys	Asp	Lys	Pro	Phe	Lys	Cys	His	Asn	Cys	His	Arg
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Ala	Tyr	Thr	Asp	Ala	Ala	Ser	Leu	Glu	Val	His	Leu	Ser	Thr	His	Thr
			20					25					30		
Val	Lys	His	Ala	Lys	Val	Tyr	Thr	Cys	Thr	Ile	Cys	Ser	Arg	Ala	Tyr
			35				40					45			
Thr	Ser	Glu	Thr	Tyr	Leu	Met	Lys	His	Met	Arg	Lys	His	Asn	Pro	Pro
			50			55					60				
Asp	Leu	Gln	Gln	Gln	Val	Gln	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Val	Ala
65					70					75				80	
Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala
				85				90					95		
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 Pro Gly Ala Ala Pro Gln Gly Gly Gly Gly Gly Asp Ser Asn Pro Asn  
 130 135 140  
 Pro Pro Pro Gln Cys Ser Phe Asp Leu Thr Pro Tyr Lys Thr Ala Glu  
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 Glu His Leu Ala Ser Ser  
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<210> 6015  
 <211> 612  
 <212> DNA  
 <213> Homo sapiens

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 <211> 99  
 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Leu Ser Met Ser Cys Asn Gln Asn Lys Leu Asp Ser Pro Gly Arg Ala

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Ser His Gly Ser Ser Leu Pro Phe Asn Gln Asp	Ser Gln Lys Pro Ala			
65	70	75	80	
Phe Tyr Asn Ile Phe Leu Lys Lys Ser His Ser	Phe Gln Ser Leu Leu			
	85	90	95	
Gln Tyr Ile				

&lt;210&gt; 6017

&lt;211&gt; 2091

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6017

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 2091

&lt;210&gt; 6018

&lt;211&gt; 537

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6018

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 35 40 45  
 Asn Ser Gln Gln Ala Ala Asn Val Leu Ser Gly Ala Cys Gly Leu Gln  
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 Arg Gly Asp Arg Val Ala Val Met Leu Pro Arg Val Pro Glu Trp Trp  
 65 70 75 80  
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 Thr Ile Gln Met Lys Ser Thr Asp Ile Leu Tyr Arg Leu Gln Met Ser  
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 115 120 125  
 Thr Val Ala Ser Glu Cys Pro Ser Leu Arg Ile Lys Leu Leu Val Ser



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	165	170
Ala Ile Tyr Phe Thr Ser Gly Thr Ser Gly Leu Pro Lys Met Ala Glu		175
	180	185
His Ser Tyr Ser Ser Leu Gly Leu Lys Ala Lys Met Asp Ala Gly Trp		190
	195	200
Thr Gly Leu Gln Ala Ser Asp Ile Met Trp Thr Ile Ser Asp Thr Gly		205
	210	215
Trp Ile Leu Asn Ile Leu Gly Ser Leu Leu Glu Ser Trp Thr Leu Gly		220
225	230	235
Ala Cys Thr Phe Val His Leu Leu Pro Lys Phe Asp Pro Leu Val Ile		240
	245	250
Leu Lys Thr Leu Ser Ser Tyr Pro Ile Lys Ser Met Met Gly Ala Pro		255
	260	265
Ile Val Tyr Arg Met Leu Leu Gln Gln Asp Leu Ser Ser Tyr Lys Phe		270
	275	280
Pro His Leu Gln Asn Cys Leu Ala Gly Gly Glu Ser Leu Leu Pro Glu		285
	290	295
Thr Leu Glu Asn Trp Arg Ala Gln Thr Gly Leu Asp Ile Arg Glu Phe		300
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Tyr Gly Gln Thr Glu Thr Gly Leu Thr Cys Met Val Ser Lys Thr Met		320
	325	330
Lys Ile Lys Pro Gly Tyr Met Gly Thr Ala Ala Ser Cys Tyr Asp Val		335
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Gln Val Ile Asp Asp Lys Gly Asn Val Leu Pro Pro Gly Thr Glu Gly		350
	355	360
Asp Ile Gly Ile Arg Val Lys Pro Ile Arg Pro Ile Gly Ile Phe Ser		365
	370	375
Gly Tyr Val Glu Asn Pro Asp Lys Thr Ala Ala Asn Ile Arg Gly Asp		380
385	390	395
Phe Trp Leu Leu Gly Asp Arg Gly Ile Lys Asp Glu Asp Gly Tyr Phe		400
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Gln Phe Met Gly Arg Ala Asp Asp Ile Ile Asn Ser Ser Gly Tyr Arg		415
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Ile Gly Pro Ser Glu Val Glu Asn Ala Leu Met Lys His Pro Ala Val		430
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Val Glu Thr Ala Val Ile Ser Ser Pro Asp Pro Val Arg Gly Glu Val		445
	450	455
Val Lys Ala Phe Val Val Leu Ala Ser Gln Phe Leu Ser His Asp Pro		460
465	470	475
Glu Gln Leu Thr Lys Glu Leu Gln Gln His Val Lys Ser Val Thr Ala		480
	485	490
Pro Tyr Lys Tyr Pro Arg Lys Ile Glu Phe Val Leu Asn Leu Pro Lys		495
	500	505
Thr Val Thr Gly Lys Ile Gln Arg Ala Lys Leu Arg Asp Lys Glu Trp		510
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&lt;210&gt; 6019

&lt;211&gt; 3002

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6019

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3002

&lt;210&gt; 6020

&lt;211&gt; 387

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6020

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 35           40           45
Ile Glu Asp Ile Cys Ile Cys Cys Gly Ser Leu Gln Val His Thr Gln
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His Pro Leu Phe Glu Gly Ile Cys Ala Pro Cys Lys Asp Lys Phe
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Leu Asp Ala Leu Phe Leu Tyr Asp Asp Asp Gly Tyr Gln Ser Tyr Cys
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Cys Leu Pro Ser Ser Arg Ser Gly Leu Leu Gln Arg Arg Arg Lys Trp
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Arg Ser Gln Leu Lys Ala Phe Tyr Asp Arg Glu Ser Glu Asn Pro Leu
165           170           175
Glu Met Phe Glu Thr Val Pro Val Trp Arg Arg Gln Pro Val Arg Val
180           185           190
Leu Ser Leu Phe Glu Asp Ile Lys Lys Glu Leu Thr Ser Leu Gly Phe
195           200           205
Leu Glu Ser Gly Ser Asp Pro Gly Gln Leu Lys His Val Val Asp Val
210           215           220
Thr Asp Thr Val Arg Lys Asp Val Glu Glu Trp Gly Pro Phe Asp Leu
225           230           235           240
Val Tyr Gly Ala Thr Ala Pro Leu Gly His Thr Cys Asp Arg Pro Pro
245           250           255
Ser Trp Tyr Leu Phe Gln Phe His Arg Phe Leu Gln Tyr Ala Arg Pro
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305           310           315           320
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340           345           350
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Ser Ser Leu

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385

&lt;210&gt; 6021

&lt;211&gt; 3145

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6021

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<211> 708

<212> PRT

<213> Homo sapiens

<400> 6022

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&lt;211&gt; 1014

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens



&lt;400&gt; 6023

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&lt;210&gt; 6024

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&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6024

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&lt;210&gt; 6025

&lt;211&gt; 5905

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6025

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&lt;210&gt; 6026

&lt;211&gt; 496

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6026

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Leu Ser Val Glu Gly Asp Ser Val Thr Ser Val Gly Trp Ser Glu Arg
225          230          235          240
Gly Asn Leu Val Ala Val Gly Thr His Lys Gly Phe Val Gln Ile Trp
245          250          255
Asp Ala Ala Ala Gly Lys Lys Leu Ser Met Leu Glu Gly His Thr Ala
260          265          270
Arg Val Gly Ala Leu Ala Trp Asn Ala Glu Gln Leu Ser Ser Gly Ser
275          280          285
Arg Asp Arg Met Ile Leu Gln Arg Asp Ile Arg Thr Pro Pro Leu Gln
290          295          300
Ser Glu Arg Arg Leu Gln Gly His Arg Gln Glu Val Cys Gly Leu Lys
305          310          315          320
Trp Ser Thr Asp His Gln Leu Leu Ala Ser Gly Gly Asn Asp Asn Lys
325          330          335
Leu Leu Val Trp Asn His Ser Ser Leu Ser Pro Val Gln Gln Tyr Thr
340          345          350
Glu His Leu Ala Ala Val Lys Ala Ile Ala Trp Ser Pro His Gln His
355          360          365
Gly Leu Leu Ala Ser Gly Gly Gly Thr Ala Asp Arg Cys Ile Arg Phe
370          375          380
Trp Asn Thr Leu Thr Gly Gln Pro Leu Gln Cys Ile Asp Thr Gly Ser
385          390          395          400
Gln Val Cys Asn Leu Ala Trp Ser Lys His Ala Asn Glu Leu Val Ser
405          410          415
Thr His Gly Tyr Ser Gln Asn Gln Ile Leu Val Trp Lys Tyr Pro Ser
420          425          430
Leu Thr Gln Val Ala Lys Leu Thr Gly His Ser Tyr Arg Val Leu Tyr

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435	440	445
Leu Ala Met Ser Pro Asp Gly Glu Ala Ile Val Thr Gly Ala Gly Asp		
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Glu Thr Leu Arg Phe Trp Asn Val Phe Ser Lys Thr Arg Ser Thr Lys		
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&lt;210&gt; 6027

&lt;211&gt; 305

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6027

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&lt;210&gt; 6028

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6028

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Ala Gly Tyr Ser Val Val Glu Met Asn Ala Ser Asp Asp Arg Ser Pro		
20	25	30
Glu Val Phe Arg Thr Arg Ile Glu Ala Ala Thr Gln Met Glu Ser Gly		
35	40	45
Leu Gly Ala Ala Gly Lys Pro Asn Cys Leu Val Ile Asp Glu Ile Asp		
50	55	60
Gly Ala Pro Val Val Gly Ser Leu Met Pro Gly		
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&lt;210&gt; 6029

&lt;211&gt; 1350

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6029

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&lt;210&gt; 6030

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6030

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Met	Trp	Ala	Glu	Glu	Leu	Arg	Ala	Ala	His	Pro	Arg	Trp	Leu	His	Ile
			20					25					30		
His	Thr	Gly	Thr	Ser	His	Pro	Pro	Arg	Phe	Gly	Leu	Ala	Glu	Thr	Ser



	35		40		45	
Phe	His	Ser	Ser	Lys	Ala	Ser
	50		55		60	
Ser	Gln	Glu	Glu	Phe	Leu	Asp
65			70		75	
Ala	Gln	Ser	Trp	Arg	Leu	Gln
		85		90		95
Ala	Pro	Ser				

&lt;210&gt; 6031

&lt;211&gt; 1316

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6031

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<212> PRT

<213> Homo sapiens

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 Asn Pro Tyr Thr Ile Leu Ser Cys Val Ala Lys Ser Thr Cys Ala Ile  
 35 40 45  
 Asn Asn Thr Leu Ile Ala Phe Phe Ile Leu Thr Thr Ile Lys Gly Ser  
 50 55 60  
 Ala Phe Leu Ser Ala Ile Phe Leu Ala Leu Ala Thr Tyr Gln Ser Leu  
 65 70 75 80  
 Tyr Pro Leu Thr Leu Phe Val Pro Gly Leu Leu Tyr Leu Leu Gln Arg  
 85 90 95  
 Gln Tyr Ile Pro Val Lys Met Lys Ser Lys Ala Phe Trp Ile Phe Ser  
 100 105 110  
 Trp Glu Tyr Ala Met Met Tyr Val Gly Ser Leu Val Val Ile Ile Cys  
 115 120 125  
 Leu Ser Phe Phe Leu Leu Ser Ser Trp Asp Phe Ile Pro Ala Val Tyr  
 130 135 140  
 Gly Phe Ile Leu Ser Val Pro Asp Leu Thr Pro Asn Ile Gly Leu Phe  
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 Trp Tyr Phe Phe Ala Glu Met Phe Glu His Phe Ser Leu Phe Phe Val  
 165 170 175  
 Cys Val Phe Gln Ile Asn Val Phe Phe Tyr Thr Ile Pro Leu Ala Ile  
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 195 200 205  
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 225 230 235 240  
 Ile Phe Val Leu Thr Cys Ile Ile Ile Val Cys Ser Leu Leu Phe Pro  
 245 250 255  
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 275 280 285  
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&lt;210&gt; 6034

&lt;211&gt; 1096

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6034

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Ser	Ile	Ser	Thr	Asn	Leu	Lys	Asn	Ser	Phe	Ala	Ser	Ala	Leu	Arg	Thr
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Lys Val Gly Gly Val Asp Pro Lys Gln Leu Ala Val Tyr Glu Glu Phe
          275          280          285
Ala Arg Asn Val Pro Gly Phe Leu Pro Thr Asn Asp Leu Ser Gln Pro
          290          295          300
Thr Gly Phe Leu Ala Gln Pro Met Lys Gln Ala Trp Ala Thr Asp Asp
305          310          315          320
Val Ala Gln Ile Tyr Asp Lys Cys Ile Thr Glu Leu Glu Gln His Leu
          325          330          335
His Ala Ile Pro Thr Leu Ala Met Asn Pro Gln Ala Gln Ala Leu
          340          345          350
Arg Ser Leu Leu Glu Val Val Val Leu Ser Arg Asn Ser Arg Asp Ala
          355          360          365
Ile Ala Ala Leu Gly Leu Leu Gln Lys Ala Val Glu Gly Leu Leu Asp
          370          375          380
Ala Thr Ser Gly Ala Asp Ala Asp Leu Leu Leu Arg Tyr Arg Glu Cys
385          390          395          400
His Leu Leu Val Leu Lys Ala Leu Gln Asp Gly Arg Ala Tyr Gly Ser
          405          410          415
Pro Trp Cys Asn Lys Gln Ile Thr Arg Cys Leu Ile Glu Cys Arg Asp
          420          425          430
Glu Tyr Lys Tyr Asn Val Glu Ala Val Glu Leu Leu Ile Arg Asn His
          435          440          445
Leu Val Asn Met Gln Gln Tyr Asp Leu His Leu Ala Gln Ser Met Glu
          450          455          460
Asn Gly Leu Asn Tyr Met Ala Val Ala Phe Ala Met Gln Leu Val Lys
465          470          475          480
Ile Leu Leu Val Asp Glu Arg Ser Val Ala His Val Thr Glu Ala Asp
          485          490          495
Leu Phe His Thr Ile Glu Thr Leu Met Arg Ile Asn Ala His Ser Arg
          500          505          510
Gly Asn Ala Pro Glu Gly Leu Pro Gln Leu Met Glu Val Val Arg Ser
          515          520          525
Asn Tyr Glu Ala Met Ile Asp Arg Ala His Gly Gly Pro Asn Phe Met
          530          535          540
Met His Ser Gly Ile Ser Gln Ala Ser Glu Tyr Asp Asp Pro Pro Gly
545          550          555          560
Leu Arg Glu Lys Ala Glu Tyr Leu Leu Arg Glu Trp Val Asn Leu Tyr
          565          570          575
His Ser Ala Ala Ala Gly Arg Asp Ser Thr Lys Ala Phe Ser Ala Phe
          580          585          590
Val Gly Gln Val Glu Leu Leu Glu Arg Lys Met His Gln Gln Gly Ile
          595          600          605
Leu Lys Thr Asp Asp Leu Ile Thr Arg Phe Phe Arg Leu Cys Thr Glu
          610          615          620
Met Cys Val Glu Ile Ser Tyr Arg Ala Gln Ala Glu Gln Gln His Asn
625          630          635          640
Pro Ala Ala Asn Pro Thr Met Ile Arg Ala Lys Cys Tyr His Asn Leu
          645          650          655
Asp Ala Phe Val Arg Leu Ile Ala Leu Leu Val Lys His Ser Gly Glu

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Ala Thr Asn Thr Val Thr Lys Ile Asn Leu Leu Asn Lys Val Leu Gly
        675                680                685
Ile Val Val Gly Val Leu Leu Gln Asp His Asp Val Arg Gln Ser Glu
        690                695                700
Phe Gln Gln Leu Pro Tyr His Arg Ile Phe Ile Met Leu Leu Leu Glu
705                710                715                720
Leu Asn Ala Pro Glu His Val Leu Glu Thr Ile Asn Phe Gln Thr Leu
        725                730                735
Thr Ala Phe Cys Asn Thr Phe His Ile Leu Arg Pro Thr Lys Ala Pro
        740                745                750
Gly Phe Val Tyr Ala Trp Leu Glu Leu Ile Ser His Arg Ile Phe Ile
        755                760                765
Ala Arg Met Leu Ala His Thr Pro Gln Gln Lys Gly Trp Pro Met Tyr
        770                775                780
Ala Gln Leu Leu Ile Asp Leu Phe Lys Tyr Leu Ala Pro Phe Leu Arg
785                790                795                800
Asn Val Glu Leu Thr Lys Pro Met Gln Ile Leu Tyr Lys Gly Thr Leu
        805                810                815
Arg Val Leu Leu Val Leu Leu His Asp Phe Pro Glu Phe Leu Cys Asp
        820                825                830
Tyr His Tyr Gly Phe Cys Asp Val Ile Pro Pro Asn Cys Ile Gln Leu
        835                840                845
Arg Asn Leu Ile Leu Ser Ala Phe Pro Arg Asn Met Arg Leu Pro Asp
        850                855                860
Pro Phe Thr Pro Asn Leu Lys Val Asp Met Leu Ser Glu Ile Asn Ile
865                870                875                880
Ala Pro Arg Ile Leu Thr Asn Phe Thr Gly Val Met Pro Pro Gln Phe
        885                890                895
Lys Lys Asp Leu Asp Ser Tyr Leu Lys Thr Arg Ser Pro Val Thr Phe
        900                905                910
Leu Ser Asp Leu Arg Ser Asn Leu Gln Val Ser Asn Glu Pro Gly Asn
        915                920                925
Arg Tyr Asn Leu Gln Leu Ile Asn Ala Leu Val Leu Tyr Val Gly Thr
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Gln Ala Ile Ala His Ile His Asn Lys Gly Ser Thr Pro Ser Met Ser
945                950                955                960
Thr Ile Thr His Ser Ala His Met Asp Ile Phe Gln Asn Leu Ala Val
        965                970                975
Asp Leu Asp Thr Glu Gly Arg Tyr Leu Phe Leu Asn Ala Ile Ala Asn
        980                985                990
Gln Leu Arg Tyr Pro Asn Ser His Thr His Tyr Phe Ser Cys Thr Met
        995                1000                1005
Leu Tyr Leu Phe Ala Glu Ala Asn Thr Glu Ala Ile Gln Glu Gln Ile
1010                1015                1020
Thr Arg Val Leu Leu Glu Arg Leu Ile Val Asn Arg Pro His Pro Trp
1025                1030                1035                1040
Gly Leu Leu Ile Thr Phe Ile Glu Leu Ile Lys Asn Pro Ala Phe Lys
        1045                1050                1055
Phe Trp Asn His Glu Phe Val His Cys Ala Pro Glu Ile Glu Lys Leu
        1060                1065                1070
Phe Gln Ser Val Ala Gln Cys Cys Met Gly Gln Lys Gln Ala Gln Gln
        1075                1080                1085
Val Met Glu Gly Thr Gly Ala Ser

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1090

1095

&lt;210&gt; 6035

&lt;211&gt; 320

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6035

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 300  
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 320

&lt;210&gt; 6036

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6036

Met	His	Leu	His	Trp	Phe	Leu	Pro	Ser	Val	Leu	Pro	Gly	Leu	Gln	Ala
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Ser	Asn	Leu	Phe	Ser	Cys	Cys	Gln	Val	Glu	Pro	His	Ile	Gln	Gly	Leu
		20					25					30			
Arg	Gln	Val	Leu	Gln	Glu	Pro	Ser	Arg	Glu	Pro	Pro	Gly	Trp	Leu	Gly
		35				40						45			
Ala	Trp	Pro	Arg	Ser	Gln	Ser	His	Asn	Ala	His	His	Cys	Pro	Thr	Met
	50				55				60						
Pro	Phe	Arg	Met	Glu	Pro	Leu	Ile	His	Trp	Ala	His	Ser	His	Gly	Gln
65				70				75						80	
Arg	Asp	Tyr	Pro	Trp	Thr	Met	Ile	Glu	Thr	Leu	Pro	Ile	Pro	Gln	Thr
			85				90							95	
Gln	Gln	Gly	Leu	Cys	Asp										
			100												

&lt;210&gt; 6037

&lt;211&gt; 3910

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6037

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 3910

&lt;210&gt; 6038

&lt;211&gt; 214

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6038

Lys	Gln	Pro	Xaa	Arg	Ser	Leu	Ala	Pro	Ala	Leu	Pro	Gly	Ala	Leu	Ser
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			20					25					30		
His	Gly	Gly	Thr	Cys	Ser	Arg	Gln	Glu	Leu	Gly	Val	Ser	Asp	Val	Leu
			35				40					45			
Gly	Tyr	Val	His	Pro	Asp	Leu	Leu	Lys	Asp	Phe	Cys	Met	Asn	Pro	Gln
			50			55					60				
Thr	Val	Leu	Leu	Leu	Arg	Val	Ile	Ala	Ala	Phe	Cys	Phe	Leu	Gly	Ile
					70					75				80	
Leu	Cys	Ser	Leu	Ser	Ala	Phe	Leu	Leu	Asp	Val	Phe	Gly	Pro	Lys	His
				85					90					95	
Pro	Ala	Leu	Lys	Ile	Thr	Arg	Arg	Tyr	Ala	Phe	Ala	His	Ile	Leu	Thr
			100				105						110		
Val	Leu	Gln	Cys	Ala	Thr	Val	Ile	Gly	Phe	Ser	Tyr	Trp	Ala	Ser	Glu
			115				120					125			
Leu	Ile	Leu	Ala	Gln	Gln	Gln	Gln	His	Lys	Lys	Tyr	His	Gly	Ser	Gln
			130			135					140				
Val	Tyr	Val	Thr	Phe	Ala	Val	Ser	Phe	Tyr	Leu	Val	Ala	Gly	Ala	Gly
				150					155					160	
Gly	Ala	Ser	Ile	Leu	Ala	Thr	Ala	Ala	Asn	Leu	Leu	Arg	His	Tyr	Pro
				165				170						175	
Thr	Glu	Glu	Glu	Gln	Ala	Leu	Glu	Leu	Leu	Ser	Glu	Met	Glu	Glu	
			180				185					190			
Asn	Glu	Pro	Tyr	Pro	Ala	Glu	Tyr	Glu	Val	Ile	Asn	Gln	Phe	Gln	Pro
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Pro	Pro	Ala	Tyr	Thr	Pro										
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 <212> DNA  
 <213> Homo sapiens

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 <212> PRT  
 <213> Homo sapiens

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 Gln Val Trp Ala Ala Glu Ser Ala Leu Arg Gly Glu Pro Leu Trp Ala  
 35 40 45  
 Gln Asn Val Val Pro Glu Ala Glu Gly Glu Asp Asp Pro Ala Gly Glu  
 50 55 60  
 Ala Gln Ala Gly Arg Leu Pro Leu Leu Pro Cys Ala Arg Ala Tyr Val  
 65 70 75 80  
 Ser Pro Arg Ala Pro Phe Tyr Arg Pro Leu Ala Pro Glu Leu Arg Ala  
 85 90 95  
 Arg Gln Leu Glu Leu Gly Ala Glu His Ala Leu Leu Leu Asp Ala Ala  
 100 105 110  
 Gly Gln Val Phe Ser Trp Gly Gly Arg His Gly Gln Leu Gly His  
 115 120 125  
 Gly Thr Leu Glu Ala Glu Leu Glu Pro Arg Leu Leu Glu Ala Leu Gln  
 130 135 140  
 Gly Leu Val Met Ala Glu Val Ala Ala Gly Gly Trp His Ser Val Cys  
 145 150 155 160  
 Val Ser Glu Thr Gly Asp Ile Tyr Ile Trp Gly Trp Asn Glu Ser Gly  
 165 170 175  
 Gln Leu Ala Leu Pro Thr Arg Asn Leu Ala Glu Asp Gly Glu Thr Val  
 180 185 190  
 Ala Arg Glu Ala Thr Glu Leu Asn Glu Asp Gly Ser Gln Val Lys Arg  
 195 200 205  
 Thr Gly Gly Ala Glu Asp Gly Ala Pro Ala Pro Phe Ile Ala Val Gln  
 210 215 220  
 Pro Phe Pro Ala Leu Leu Asp Leu Pro Met Gly Ser Asp Ala Val Lys  
 225 230 235 240  
 Ala Ser Cys Gly Ser Arg His Thr Ala Val Val Thr Arg Thr Gly Glu  
 245 250 255  
 Leu Tyr Thr Trp Gly Trp Gly Lys Tyr Gly Gln Leu Gly His Glu Asp  
 260 265 270  
 Thr Thr Ser Leu Asp Arg Pro Arg Arg Val Glu Tyr Phe Val Asp Lys  
 275 280 285  
 Gln Leu Gln Val Lys Ala Val Thr Cys Gly Pro Trp Asn Thr Tyr Val  
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 Tyr Ala Val Glu Lys Gly Lys Ser  
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&lt;210&gt; 6041

&lt;211&gt; 291

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6041

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 35 40 45  
 Ile Met Ala Ala Leu Asn Ser Gln Thr Ala Val Gln Phe Gln Gln Tyr  
 50 55 60  
 Ala Ala Gln Gln Tyr Pro Gly Asn Tyr Glu Gln Gln Gln Ile Leu Ile  
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 <212> PRT  
 <213> Homo sapiens

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 Lys Ile Ala Pro Leu Glu Ser His His Arg Pro Lys Arg Pro Asp Asp  
 35 40 45  
 Pro Pro Gly Thr Leu Asn Pro Cys Pro Glu Arg Gly Gly Ala Gly Val  
 50 55 60  
 Trp Ile Pro Ala Gly Ser Phe Gly Thr Gly Lys Asn Arg Gly Cys Ser  
 65 70 75 80  
 Asp Arg Val Phe Thr Lys Thr Cys Ile Arg Gln Asp Pro Gly Arg Met  
 85 90 95  
 Trp Val Ala Pro Pro Leu Cys Trp Ala Arg Arg Met Cys Pro His Arg  
 100 105 110  
 Ser Gln Ile Leu Phe Pro Gln Trp Val Val Gln Asp Thr Leu Asn Phe  
 115 120 125  
 Cys Met Asn Trp Asp Ile Gln Asn Ser Leu Glu Gln Pro Pro Pro Ser  
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<210> 6045

<211> 1916

<212> DNA

<213> Homo sapiens

<400> 6045

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 1916

&lt;210&gt; 6046

&lt;211&gt; 457

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6046

Thr	Arg	Val	Glu	Thr	His	Phe	Gln	Pro	Arg	Gly	Ala	Gly	Glu	Gly	Gly
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Pro	Tyr	Gly	Cys	Lys	Asp	Ala	Leu	Arg	Gln	Gln	Leu	Arg	Ser	Ala	Arg
			20					25					30		
Glu	Val	Ile	Ala	Val	Val	Met	Asp	Val	Phe	Thr	Asp	Ile	Asp	Ile	Phe
		35				40					45				
Arg	Asp	Leu	Gln	Glu	Ile	Cys	Arg	Lys	Gln	Gly	Val	Ala	Val	Tyr	Ile
	50				55					60					
Leu	Leu	Asp	Gln	Ala	Leu	Leu	Ser	Gln	Phe	Leu	Asp	Met	Cys	Met	Asp

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Thr Gly Asn Ile Tyr Tyr Ala Arg Ser Gly Thr Lys Ile Ile Gly Lys
      100        105        110
Val His Glu Lys Phe Thr Leu Ile Asp Gly Ile Arg Val Ala Thr Gly
      115        120        125
Ser Tyr Ser Phe Thr Trp Thr Asp Gly Lys Leu Asn Ser Ser Asn Leu
      130        135        140
Val Ile Leu Ser Gly Gln Val Val Glu His Phe Asp Leu Glu Phe Arg
145          150          155          160
Ile Leu Tyr Ala Gln Ser Lys Pro Ile Ser Pro Lys Leu Leu Ser His
      165        170        175
Phe Gln Ser Ser Asn Lys Phe Asp His Leu Thr Asn Arg Lys Pro Gln
      180        185        190
Ser Lys Glu Leu Thr Leu Gly Asn Leu Leu Arg Met Arg Leu Ala Arg
      195        200        205
Leu Ser Ser Thr Pro Arg Lys Ala Asp Leu Asp Pro Glu Met Pro Ala
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Glu Gly Lys Ala Glu Arg Lys Pro His Asp Cys Glu Ser Ser Thr Val
225          230          235          240
Ser Glu Glu Asp Tyr Phe Ser Ser His Arg Asp Glu Leu Gln Ser Arg
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Lys Ala Ile Asp Ala Ala Thr Gln Thr Glu Pro Gly Glu Glu Met Pro
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Gly Leu Ser Val Ser Glu Val Gly Thr Gln Thr Ser Ile Thr Thr Ala
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Cys Ala Gly Thr Gln Thr Ala Val Ile Thr Arg Ile Ala Ser Ser Gln
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Thr Thr Ile Trp Ser Arg Ser Thr Thr Thr Gln Thr Asp Met Asp Glu
305          310          315          320
Asn Ile Leu Phe Pro Arg Gly Thr Gln Ser Thr Glu Gly Ser Pro Val
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Ser Lys Met Ser Val Ser Arg Ser Ser Ser Leu Lys Ser Ser Ser Ser
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Val Ser Ser Gln Gly Ser Val Ala Ser Ser Thr Gly Ser Pro Ala Ser
      355        360        365
Ile Arg Thr Thr Asp Phe His Asn Pro Gly Tyr Pro Lys Tyr Leu Gly
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Thr Pro His Leu Glu Leu Tyr Leu Ser Asp Ser Leu Arg Asn Leu Asn
385          390          395          400
Lys Glu Arg Gln Phe His Phe Ala Gly Ile Arg Ser Arg Leu Asn His
      405        410        415
Met Leu Ala Met Leu Ser Arg Arg Thr Leu Phe Thr Glu Asn His Leu
      420        425        430
Gly Leu His Ser Gly Asn Phe Ser Arg Val Asn Leu Leu Ala Val Arg.
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Asp Val Ala Leu Tyr Pro Ser Tyr Gln
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&lt;210&gt; 6047

&lt;211&gt; 773

&lt;212&gt; DNA .

&lt;213&gt; Homo sapiens

&lt;400&gt; 6047

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&lt;210&gt; 6048

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6048

Met Val Lys Arg Val Ser Glu Met Ser Asp Lys Lys Gln Leu Arg Ser  
 1 5 10 15  
 Arg Ser Cys Arg Pro Pro Gly Ser Ser Ser Gly Ser Pro Ser Ser Thr  
 20 25 30  
 Gly Thr Thr Leu Glu Lys Ser Cys Leu His His Cys Ser Gly Gly Gly  
 35 40 45  
 His Leu Pro Ser Ala Cys Leu Gly Ala Arg Arg Ser Ser Ser Leu Leu  
 50 55 60  
 Gly Tyr Gly Ser Cys Arg Asp Thr Gln Ser Trp Thr Pro Asp Pro Leu  
 65 70 75 80  
 Pro His Pro Pro Ser Leu Ser Pro Gln Ser Leu Leu Tyr Ser Gln Ala  
 85 90 95  
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 Glu Ala Ala Arg Arg Arg Cys Gly His Thr Val Ala Leu Ser Ala Arg  
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 Asp

<210> 6049  
 <211> 479  
 <212> DNA  
 <213> Homo sapiens

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 360  
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<210> 6050  
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 <212> PRT  
 <213> Homo sapiens

<400> 6050  
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 35 40 45  
 Ser Asn Glu Arg Glu Asp Phe Asp Ser Thr Ser Ser Ser Ser Ser Thr  
 50 55 60  
 Pro Pro Leu Gln Pro Arg Asp Ser Ala Ser Pro Ser Thr Ser Ser Phe  
 65 70 75 80  
 Cys Leu Gly Val Ser Val Ala Ala Ser Ser His Val Pro Ile Gln Lys  
 85 90 95  
 Lys Leu Arg Phe Glu Asp Thr Leu Glu Phe Val Gly Phe Asp Ala Lys  
 100 105 110  
 Met Ala Glu Glu Ser Ser Ser Ser Ser Ser Ser Ser Pro Thr Ala  
 115 120 125  
 Ala Thr Ser Gln Glu Gln Gln Leu Lys Asn Lys Ser Ile Leu Ile Ser  
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 145 150 155

<210> 6051  
 <211> 2404  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 6051

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300  
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 caac  
 2404

&lt;210&gt; 6052

&lt;211&gt; 518

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6052

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			20					25					30		
Thr	Gly	His	Glu	Leu	Leu	Ser	Glu	Leu	Gln	Gln	Arg	Arg	Phe	Asn	Gly
		35					40					45			
Ser	Asp	Gly	Gly	Val	Ser	Trp	Ser	Pro	Met	Asp	Asp	Glu	Leu	Leu	Ala
		50				55				60					
Gln	Pro	Gln	Val	Met	Lys	Leu	Leu	Asp	Ser	Leu	Arg	Glu	Gln	Tyr	Thr
65					70					75				80	
Arg	Tyr	Gln	Glu	Val	Cys	Arg	Gln	Arg	Ser	Lys	Arg	Thr	Gln	Leu	Glu
			85					90					95		
Glu	Ile	Gln	Gln	Lys	Val	Met	Gln	Val	Val	Asn	Trp	Leu	Glu	Gly	Pro
			100					105					110		
Gly	Ser	Glu	Gln	Leu	Arg	Ala	Gln	Trp	Gly	Ile	Gly	Asp	Ser	Ile	Arg
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Ala	Ser	Gln	Ala	Leu	Gln	Gln	Lys	His	Glu	Glu	Ile	Glu	Ser	Gln	His

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Ser Glu Trp Phe Ala Val Tyr Val Glu Leu Asn Gln Gln Ile Ala Ala		
145	150	155
Leu Leu Asn Ala Gly Asp Glu Glu Asp Leu Val Glu Leu Lys Ser Leu		160
	165	170
Gln Gln Gln Leu Ser Asp Val Cys Tyr Arg Gln Ala Ser Gln Leu Glu		175
	180	185
Phe Arg Gln Asn Leu Leu Gln Ala Ala Leu Glu Phe His Gly Val Ala		190
	195	200
Gln Asp Leu Ser Gln Gln Leu Asp Gly Leu Leu Gly Met Leu Cys Val		205
	210	215
Asp Val Ala Pro Ala Asp Gly Ala Ser Ile Gln Gln Thr Leu Lys Leu		220
225	230	235
Leu Glu Glu Lys Leu Lys Ser Val Asp Val Gly Leu Gln Gly Leu Arg		240
	245	250
Glu Lys Gly Gln Gly Leu Leu Asp Gln Ile Ser Asn Gln Ala Ser Xaa		255
	260	265
Gly Pro Met Glu Arg Met Xaa Thr Ile Glu Asn Lys Glu Asn Val Asp		270
	275	280
His Ile Gln Gly Val Met Glu Asp Met Gln Leu Arg Lys Gln Arg Cys		285
	290	295
Glu Asp Met Val Asp Val Arg Arg Leu Lys Met Leu Gln Met Val Gln		300
305	310	315
Leu Phe Lys Cys Glu Glu Asp Ala Ala Lys Ala Val Glu Trp Leu Ser		320
	325	330
Glu Leu Leu Asp Ala Leu Leu Lys Thr His Ile Arg Leu Gly Asp Asp		335
	340	345
Ala Gln Glu Thr Lys Val Leu Leu Glu Lys His Arg Lys Phe Val Asp		350
	355	360
Val Ala Gln Ser Thr Tyr Asp Tyr Gly Arg Gln Leu Leu Gln Ala Thr		365
	370	375
Val Val Leu Cys Gln Ser Leu Arg Cys Thr Ser Arg Ser Ser Gly Asp		380
385	390	395
Thr Leu Pro Arg Leu Asn Arg Val Trp Lys Gln Phe Thr Ile Ala Ser		400
	405	410
Glu Glu Arg Val His Arg Leu Glu Met Ala Ile Ala Phe His Ser Asn		415
	420	425
Ala Glu Lys Ile Leu Gln Asp Cys Pro Glu Glu Pro Glu Ala Ile Asn		430
	435	440
Asp Glu Glu Gln Phe Asp Glu Ile Glu Ala Val Gly Lys Ser Leu Leu		445
	450	455
Asp Arg Leu Thr Val Pro Val Val Tyr Pro Asp Gly Thr Glu Gln Tyr		460
465	470	475
Phe Gly Ser Pro Ser Asp Met Ala Ser Thr Ala Glu Asn Ile Arg Asp		480
	485	490
Arg Met Lys Leu Val Asn Leu Lys Arg Gln Gln Leu Arg His Pro Glu		495
	500	505
Met Val Thr Thr Glu Ser		510
515		

&lt;210&gt; 6053

&lt;211&gt; 3257

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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<210> 6054

<211> 382

<212> PRT

<213> Homo sapiens

<400> 6054

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&lt;210&gt; 6055

&lt;211&gt; 2089

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6055

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<211> 285

<212> PRT

<213> Homo sapiens

<400> 6056

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&lt;210&gt; 6057

&lt;211&gt; 3924

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6057

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&lt;210&gt; 6058

&lt;211&gt; 500

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6059

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1080

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<210> 6060

<211> 313

<212> PRT

<213> Homo sapiens

<400> 6060

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			20					25					30		
Ile	Ser	Tyr	Thr	Ile	Thr	Ile	Phe	Gly	Asn	Val	Ser	Ile	Met	Met	Val
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Cys	Ile	Leu	Asp	Pro	Lys	Leu	His	Thr	Pro	Met	Tyr	Phe	Phe	Leu	Thr
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Phe	Phe	Cys	Glu	Val	Pro	Ala	Leu	Leu	Lys	Leu	Ser	Cys	Ala	Asp	Thr
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Lys	Pro	Ile	Glu	Ala	Glu	Leu	Phe	Phe	Phe	Ser	Val	Leu	Ile	Leu	Leu
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Val	Leu	Lys	Ile	Arg	Ser	Ala	Glu	Gly	Arg	Gln	Lys	Ala	Phe	Gly	Thr
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			245						250					255	
Tyr	Met	Tyr	Leu	Gln	Pro	Pro	Ser	Ser	Thr	Ser	Lys	Asp	Trp	Gly	Lys

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	275		280		285										
Ile	Tyr	Ser	Leu	Arg	Asn	Lys	Asp	Met	Lys	Glu	Ala	Phe	Lys	Arg	Leu
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&lt;210&gt; 6061

&lt;211&gt; 1582

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6061

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<210> 6062

<211> 226

<212> PRT

<213> Homo sapiens

<400> 6062

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		20						25					30		
Arg	Pro	Arg	Asp	Leu	Leu	Gln	Arg	Tyr	Asp	Ser	Lys	Pro	Ile	Val	Asp
		35					40					45			
Leu	Ile	Gly	Ala	Met	Glu	Thr	Gln	Ser	Glu	Pro	Ser	Glu	Leu	Glu	Leu
	50					55					60				
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65					70					75				80	
Glu	Asp	Trp	Ile	Glu	Asp	Ala	Ser	Gly	Leu	Met	Ser	His	Cys	Ile	Ala
			85						90					95	
Ile	Leu	Lys	Ile	Cys	His	Thr	Leu	Thr	Glu	Lys	Leu	Val	Ala	Met	Thr
			100					105					110		
Met	Gly	Ser	Gly	Ala	Lys	Met	Lys	Thr	Ser	Ala	Ser	Val	Ser	Asp	Ile
	115						120					125			
Ile	Val	Val	Ala	Lys	Arg	Ile	Ser	Pro	Arg	Val	Asp	Asp	Val	Val	Lys
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Cys	His	Leu	Thr	Gly	Gly	Leu	Asp	Trp	Ile	Asp	Gln	Ser	Leu	Ser	Ala
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Pro	Asp	Lys	Gly	Leu	Pro	Gly	Pro	Glu	Gly	Phe	Leu	Gln	Glu	Gln	Ser
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<210> 6063

<211> 2286

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6063

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840  
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900  
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960  
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&lt;210&gt; 6064

&lt;211&gt; 233

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6064

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			20				25					30			
Phe	Leu	His	Pro	Asp	Leu	Gly	Val	Gly	Gly	Ala	Glu	Arg	Leu	Val	Leu
		35				40					45				
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	50					55					60				
Thr	Ala	His	Tyr	Asp	Pro	Gly	His	Cys	Phe	Ala	Glu	Ser	Arg	Glu	Leu
65				70					75					80	
Pro	Val	Arg	Cys	Ala	Gly	Asp	Trp	Leu	Pro	Arg	Gly	Leu	Gly	Trp	Gly
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Gly	Arg	Gly	Ala	Ala	Val	Cys	Ala	Tyr	Val	Arg	Met	Val	Phe	Leu	Ala
			100					105					110		
Leu	Tyr	Val	Leu	Phe	Leu	Ala	Asp	Glu	Glu	Phe	Asp	Val	Val	Val	Cys
		115				120					125				
Asp	Gln	Val	Ser	Ala	Cys	Ile	Pro	Val	Phe	Arg	Leu	Ala	Arg	Arg	Arg
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Lys	Lys	Ile	Leu	Phe	Tyr	Cys	His	Phe	Pro	Asp	Leu	Leu	Leu	Thr	Lys

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Glu Glu Tyr Thr Thr Gly Met Ala Asp Cys Ile Leu Val Asn Ser Gln
             180             185             190
Phe Thr Ala Ala Val Phe Lys Glu Thr Phe Lys Ser Leu Ser His Ile
             195             200             205
Asp Pro Asp Val Leu Tyr Pro Ser Leu Asn Val Thr Ser Phe Asp Ser
             210             215             220
Val Val Pro Glu Xaa Ser Trp Met Thr
225             230

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&lt;210&gt; 6065

&lt;211&gt; 2084

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6065

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1080

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 2084

&lt;210&gt; 6066

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6066

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		20					25						30		
Ala	Ile	Asp	Lys	Pro	Thr	Tyr	Ala	Thr	Lys	Trp	Pro	Ile	Arg	His	Gly
		35					40					45			
Ile	Ile	Glu	Asp	Trp	Asp	Leu	Met	Glu	Arg	Phe	Met	Glu	Gln	Val	Val
	50					55				60					
Phe	Lys	Tyr	Leu	Arg	Ala	Glu	Pro	Glu	Asp	His	Tyr	Phe	Leu	Met	Gly
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&lt;210&gt; 6067

&lt;211&gt; 406



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6067

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406

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&lt;210&gt; 6068

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6068

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35     40     45
Ser Arg Ser Ser Glu Pro Pro Ala Cys Pro Arg His Trp Pro Cys Pro
50     55     60
Pro Gly Leu Pro Phe Gly Gln Gly Ala Val Ala Arg Ala Ala Pro Cys
65     70     75     80
Pro Ala Tyr Ser His Ser Ala Val Gly Arg Pro Pro Leu Pro Arg Lys
85     90     95
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&lt;210&gt; 6069

&lt;211&gt; 456

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6069

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120
ctggagtact gtatcatggg cattgggggc cccaacgtgg gcaagtcctc cctcatcaac
180

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<210> 6070

<211> 148

<212> PRT

<213> Homo sapiens

<400> 6070

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		20						25					30		
His	Arg	Tyr	His	Arg	Lys	Glu	Asn	Leu	Glu	Tyr	Cys	Ile	Met	Val	Ile
		35				40					45				
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	50					55					60				
Gln	His	Leu	Arg	Lys	Gly	Lys	Ala	Thr	Arg	Val	Gly	Gly	Glu	Pro	Gly
65					70					75				80	
Ile	Thr	Arg	Ala	Val	Met	Ser	Lys	Ile	Gln	Val	Glu	Ser	Ser	Gly	Ala
			85						90					95	
Arg	Pro	Ser	Thr	Leu	Ser	Arg	Ala	Leu	Gln	Ala	Ser	Gly	Thr	Cys	Arg
			100					105					110		
Pro	Leu	Cys	Gly	Phe	Arg	Leu	Leu	Thr	Thr	Leu	Pro	Ser	Pro	Pro	Leu
		115					120					125			
Ser	Val	Pro	Ala	Glu	His	Pro	Arg	Gly	Arg	His	Cys	Pro	Ala	Leu	Ile
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Pro	Gln	Ser	Ser												
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<210> 6071

<211> 2633

<212> DNA

<213> Homo sapiens

<400> 6071

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 2633

&lt;210&gt; 6072

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6072

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Ala	Glu	Ala	Gly	Gly	Ser	Phe	Glu	Val	Arg	Ser	Ser	Arg	Pro	Ala	Trp
			20					25					30		
Pro	Thr	Trp	Arg	Asn	Pro	Ile	Ser	Thr	Lys	Asn	Thr	Lys	Ile	Asn	Lys
		35				40					45				
Ala	Trp	Trp	Arg	Val	Pro	Val	Val	Pro	Ala	Thr	Arg	Glu	Ala	Glu	Ala
	50					55					60				
Gly	Glu	Ser	Leu	Glu	Pro	Gly	Arg	Arg	Arg	Phe	Gln				
65					70					75					

&lt;210&gt; 6073

&lt;211&gt; 387

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6073

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<210> 6074

<211> 69

<212> PRT

<213> Homo sapiens

<400> 6074

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		20						25				30			
Ala	Pro	Thr	Gly	Pro	Phe	Ser	Pro	Arg	Met	Lys	Pro	Ala	Gly	Ser	Val
		35					40				45				
Asn	Asp	Met	Ala	Leu	Asp	Ala	Phe	Asp	Leu	Asp	Arg	Met	Lys	Gln	Glu
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Ile	Leu	Glu	Glu	Val											
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<210> 6075

<211> 4668

<212> DNA

<213> Homo sapiens

<400> 6075

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&lt;210&gt; 6076

&lt;211&gt; 601

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6076

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 35 40 45  
 Leu Glu Cys Cys Glu Asn Glu Val Glu Lys Val Ile Glu Glu Ile Arg  
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 Cys Lys Ala Ile Glu Arg Gly Thr Gly Asn Asp Asn Tyr Arg Thr Thr  
 65 70 75 80  
 Gly Ile Ala Thr Ile Glu Val Phe Leu Pro Pro Arg Leu Lys Lys Asp  
 85 90 95  
 Arg Lys Asn Leu Leu Glu Thr Arg Leu His Ile Thr Gly Arg Glu Leu  
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 Arg Ser Lys Ile Ala Glu Thr Phe Gly Leu Gln Glu Asn Tyr Ile Lys  
 115 120 125  
 Ile Val Ile Asn Lys Lys Gln Leu Gln Leu Gly Lys Thr Leu Glu Glu  
 130 135 140  
 Gln Gly Val Ala His Asn Val Lys Ala Met Val Leu Glu Leu Lys Gln  
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5259

595

600

&lt;210&gt; 6077

&lt;211&gt; 2093

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6077

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 2093

&lt;210&gt; 6078

&lt;211&gt; 213

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6078

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1				5					10					15	
Leu	Arg	Ala	Val	Ser	Gly	Gly	Ser	Gly	Asn	Arg	Ile	Lys	Ala	Arg	Gly
			20					25					30		
Ser	Gly	Arg	Glu	Gly	Ala	Ser	Gly	Pro	Gly	Val	Gly	Pro	His	Ile	Tyr
			35				40					45			
Val	Arg	Glu	Ala	Glu	Asp	Arg	Glu	Leu	Val	Thr	Met	Ala	Gly	Pro	Gln
			50				55				60				
Pro	Leu	Ala	Leu	Gln	Leu	Glu	Gln	Leu	Leu	Asn	Pro	Arg	Pro	Ser	Glu
65				70						75				80	
Ala	Asp	Pro	Glu	Ala	Asp	Pro	Glu	Glu	Ala	Thr	Ala	Ala	Arg	Val	Ile
			85					90					95		
Asp	Arg	Phe	Asp	Glu	Gly	Glu	Asp	Gly	Glu	Gly	Asp	Phe	Leu	Val	Val
			100					105					110		
Gly	Ser	Ile	Arg	Lys	Leu	Ala	Ser	Ala	Ser	Leu	Leu	Asp	Thr	Asp	Lys
			115				120					125			
Arg	Tyr	Cys	Gly	Lys	Thr	Thr	Ser	Arg	Lys	Ala	Trp	Asn	Glu	Asp	His
			130				135				140				
Trp	Glu	Gln	Thr	Leu	Pro	Gly	Ser	Ser	Asp	Glu	Glu	Ile	Ser	Asp	Glu
145				150						155				160	
Glu	Gly	Ser	Gly	Asp	Glu	Asp	Ser	Glu	Gly	Leu	Gly	Leu	Glu	Glu	Tyr
			165					170					175		
Asp	Glu	Asp	Asp	Leu	Gly	Ala	Ala	Glu	Glu	Gln	Glu	Cys	Gly	Asp	Gln

180 185 190  
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 195 200 205  
 Cys Pro Glu Tyr Gln  
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<210> 6079  
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 <213> Homo sapiens

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 540  
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<210> 6080  
 <211> 162  
 <212> PRT  
 <213> Homo sapiens

<400> 6080  
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 20 25 30  
 Gln Leu Gln Gly Gly Arg Phe Leu Met Gly Thr Asn Ser Pro Asp Ser  
 35 40 45  
 Arg Asp Gly Glu Gly Pro Val Arg Glu Ala Thr Val Lys Pro Phe Ala  
 50 55 60  
 Ile Asp Ile Phe Pro Val Thr Asn Lys Asp Phe Arg Asp Phe Val Arg  
 65 70 75 80  
 Glu Lys Lys Tyr Arg Thr Glu Ala Glu Met Phe Gly Trp Ser Phe Val  
 85 90 95  
 Phe Glu Asp Phe Val Ser Asp Glu Leu Arg Asn Lys Ala Thr Gln Pro

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<210> 6081
<211> 655
<212> DNA
<213> Homo sapiens
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<210> 6082
<211> 218
<212> PRT
<213> Homo sapiens
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5263

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          85          90          95
Lys Leu Ala Gly Pro Ala Ser Ile Gly Leu Leu Ser Pro Gly Ile Leu
          100          105          110
Glu Tyr Leu Leu Gln Cys Leu Lys Leu Gln Ser His Pro Thr Val Met
          115          120          125
Leu Phe Ala Leu Ile Ala Leu Glu Lys Phe Ala Gln Thr Ser Glu Asn
          130          135          140
Lys Leu Thr Ile Ser Glu Ser Ser Ile Ser Asp Arg Leu Val Thr Leu
145          150          155          160
Glu Ser Trp Ala Asn Asp Pro Asp Tyr Leu Lys Arg Gln Val Gly Phe
          165          170          175
Cys Ala Gln Trp Ser Leu Asp Asn Leu Phe Leu Lys Glu Gly Arg Gln
          180          185          190
Leu Thr Tyr Glu Lys Val Asn Leu Ser Ser Ile Arg Ala Met Leu Asn
          195          200          205
Ser Asn Asp Val Ser Glu Tyr Leu Lys Ile
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<210> 6083  
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 <212> DNA  
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120
aatgaaaggc taacagctttt acaagagaag ctgatcgtcg aaggcatctt aaccaaagcg
180
gtagaagaaa caaagcttttc aaaagaaaat cagacaagag caaaagaatc tgatttttca
240
gatactctga gtccaagcaa ggaaaaaagc agtgacgaca ctacagacgc ccaaattggat
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358

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<210> 6084  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

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<400> 6084
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Ala Asp Asn Asp Phe Thr Asn Glu Arg Leu Thr Ala Leu Gln Lys
20     25     30
Leu Ile Val Glu Gly His Leu Thr Lys Ala Val Glu Glu Thr Lys Leu
35     40     45
Ser Lys Glu Asn Gln Thr Arg Ala Lys Glu Ser Asp Phe Ser Asp Thr
50     55     60
Leu Ser Pro Ser Lys Glu Lys Ser Ser Asp Asp Thr Thr Asp Ala Gln

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65		70		75		80									
Met	Asp	Glu	Gln	Asp	Leu	Asn	Glu	Pro	Leu	Ala	Lys	Val	Ser	Leu	Leu
			85					90					95		
Lys	Asp	Asp	Leu	Gln											
			100												

&lt;210&gt; 6085

&lt;211&gt; 2307

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6085

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240
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1260

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 2280  
 aaaaaaaaaa aaaaaaaaaa aaaaaaa  
 2307

&lt;210&gt; 6086

&lt;211&gt; 84

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6086

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Arg	Gly	Ala	Ser	Leu	Cys	Val	Phe	Val	Cys	Val	Cys	Leu	Cys	Val	Arg
			20					25					30		
Ile	Thr	Leu	Gly	Val	Gln	Ala	Ser	Gly	Cys	Val	Cys	Val	Cys	Ala	Cys
			35				40						45		
Val	Cys	Val	Cys	Val	Ser	Val	Cys	Val	Cys	Val	Cys	Val	His	Thr	Gly
			50				55					60			
Gln	Pro	Pro	Tyr	Leu	Pro	Arg	Phe	Ser	Thr	Ala	Tyr	Leu	Phe	Gln	Trp
65					70					75					80
Asp	Ser	Thr	Val												



&lt;210&gt; 6087

&lt;211&gt; 1506

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6087

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180  
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<210> 6088

<211> 326

<212> PRT

<213> Homo sapiens

<400> 6088

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			20				25						30		
Pro	Gly	Asp	Leu	Leu	Ser	Ala	Arg	Leu	Leu	Ser	Gln	Glu	Lys	Arg	Ala
		35				40						45			
Ala	Glu	Thr	His	Phe	Gly	Phe	Glu	Thr	Val	Ser	Glu	Glu	Glu	Lys	Gly
	50				55					60					
Gly	Lys	Val	Tyr	Gln	Val	Phe	Glu	Ser	Val	Ala	Lys	Lys	Tyr	Asp	Val
65				70					75					80	
Met	Asn	Asp	Met	Met	Ser	Leu	Gly	Ile	His	Arg	Val	Trp	Lys	Asp	Leu
			85					90						95	
Leu	Leu	Trp	Lys	Met	His	Pro	Leu	Pro	Gly	Thr	Gln	Leu	Leu	Asp	Met
			100					105						110	
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Ser	Gln	His	Gln	Arg	Lys	Gln	Lys	Arg	Gln	Leu	Arg	Ala	Gln	Gln	Asn
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		180						185						190	
Ala	Trp	Val	Leu	Gly	Asp	Ala	Glu	Glu	Leu	Pro	Phe	Asp	Asp	Asp	Lys
		195					200						205		
Phe	Asp	Ile	Tyr	Thr	Ile	Ala	Phe	Gly	Ile	Arg	Asn	Val	Thr	His	Ile
	210					215						220			
Asp	Gln	Ala	Leu	Gln	Glu	Ala	His	Arg	Val	Leu	Lys	Pro	Gly	Gly	Arg
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	275							280					285		
Arg	Phe	Pro	Ser	Gln	Glu	Glu	Phe	Lys	Asp	Met	Ile	Glu	Asp	Ala	Gly
	290					295						300			
Phe	His	Lys	Val	Thr	Tyr	Glu	Ser	Leu	Thr	Ser	Gly	Ile	Val	Ala	Ile
305					310					315				320	
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325

&lt;210&gt; 6089

&lt;211&gt; 4211

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6089

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&lt;210&gt; 6090

&lt;211&gt; 839

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6090

Met	Ile	Met	Thr	Glu	Ser	Arg	Glu	Val	Ile	Asp	Leu	Asp	Pro	Pro	Ala
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Glu	Thr	Ser	Gln	Glu	Gln	Glu	Asp	Leu	Phe	Ile	Val	Lys	Val	Glu	Glu
		20					25				30				
Glu	Asp	Cys	Thr	Trp	Met	Gln	Glu	Tyr	Asn	Pro	Pro	Thr	Phe	Glu	Thr

```

      35              40              45
Phe Tyr Gln Arg Phe Arg His Phe Gln Tyr His Glu Ala Ser Gly Pro
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Arg Glu Ala Leu Ser Gln Leu Arg Val Leu Cys Cys Glu Trp Leu Arg
 65              70              75              80
Pro Glu Leu His Thr Lys Glu Gln Ile Leu Glu Leu Leu Val Leu Glu
      85              90              95
Gln Phe Leu Thr Ile Leu Pro Glu Glu Phe Gln Pro Trp Val Arg Glu
      100              105              110
His His Pro Glu Ser Gly Glu Glu Ala Val Ala Val Ile Glu Asn Ile
      115              120              125
Gln Arg Glu Leu Glu Glu Arg Gln Gln Ile Val Ala Cys Pro Asp
      130              135              140
Val Leu Pro Arg Lys Met Ala Thr Pro Gly Ala Val Gln Glu Ser Cys
      145              150              155              160
Ser Pro His Pro Leu Thr Val Asp Thr Gln Pro Glu Gln Ala Pro Gln
      165              170              175
Lys Pro Arg Leu Leu Glu Glu Asn Ala Leu Pro Val Leu Gln Val Pro
      180              185              190
Ser Leu Pro Leu Lys Asp Ser Gln Glu Leu Thr Ala Ser Leu Leu Ser
      195              200              205
Thr Gly Ser Gln Lys Leu Val Lys Ile Glu Glu Val Ala Asp Val Ala
      210              215              220
Val Ser Phe Ile Leu Glu Glu Trp Gly His Leu Asp Gln Ser Gln Lys
      225              230              235              240
Ser Leu Tyr Arg Asp Asp Arg Lys Glu Asn Tyr Gly Ser Ile Thr Ser
      245              250              255
Met Gly Tyr Glu Ser Arg Asp Asn Met Glu Leu Ile Val Lys Gln Ile
      260              265              270
Ser Asp Asp Ser Glu Ser His Trp Val Ala Pro Glu His Thr Glu Arg
      275              280              285
Ser Val Pro Gln Asp Pro Asp Phe Ala Glu Val Ser Asp Leu Lys Gly
      290              295              300
Met Val Gln Arg Trp Gln Val Asn Pro Thr Val Gly Lys Ser Arg Gln
      305              310              315              320
Asn Pro Ser Gln Lys Arg Asp Leu Asp Ala Ile Thr Asp Ile Ser Pro
      325              330              335
Lys Gln Ser Thr His Gly Glu Arg Gly His Arg Cys Ser Asp Cys Gly
      340              345              350
Lys Phe Phe Leu Gln Ala Ser Asn Phe Ile Gln His Arg Arg Ile His
      355              360              365
Thr Gly Glu Lys Pro Phe Lys Cys Gly Glu Cys Gly Lys Ser Tyr Asn
      370              375              380
Gln Arg Val His Leu Thr Gln His Gln Arg Val His Thr Gly Glu Lys
      385              390              395              400
Pro Tyr Lys Cys Gln Val Cys Gly Lys Ala Phe Arg Val Ser Ser His
      405              410              415
Leu Val Gln His His Ser Val His Ser Gly Glu Arg Pro Tyr Gly Cys
      420              425              430
Asn Glu Cys Gly Lys Asn Phe Gly Arg His Ser His Leu Ile Glu His
      435              440              445
Leu Lys Arg His Phe Arg Glu Lys Ser Gln Arg Cys Ser Asp Lys Arg
      450              455              460
Ser Lys Asn Thr Lys Leu Ser Val Lys Lys Lys Ile Ser Glu Tyr Ser

```

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<210> 6091
<211> 1336
<212> DNA
<213> Homo sapiens
<400> 6091
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120  
gtcctccgaa cgcggtgcc aaggagacgc tgcataaaac gggctctgca cggctcccg  
180  
ccccacccc caccaccaga gaaatagaag cagaggcatt atcttttttt tctacaaaaa  
240  
agtaggaaaa gtagaaaaag tacaagaag caacttctcg gctgtgttta agtttacaa  
300  
gtttaaggc acaagtttcc gtgaagtagg cgctattgta tgctctatgc tcagcacaca  
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1336

&lt;210&gt; 6092

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6092

Met Ala Gln Ser Trp Ala Arg Thr Gln Glu Phe Leu Cys Pro Met Cys



```

      1             5             10             15
Pro Thr Thr Trp His Ser Arg Gly Gln Gly Arg Ser Pro Ala Ser Gln
      20             25             30
Thr Pro Asn Trp Tyr Trp Val Leu Gly His Pro Asn Leu Ile Arg Asp
      35             40             45
Val Thr Arg Gln Val Pro Ser Pro Pro Ser Gly Phe Arg Leu Pro Ser
      50             55             60
Ser Arg His Glu Gly Pro Ser Pro Pro Arg Asp Leu Gly Thr Ser Gly
      65             70             75             80
Pro Ser Arg Ala Ala Ser His Lys Pro Ser Asn Glu Gln Arg Asp Ala
      85             90             95
Gly Gln Gln Leu Gln Leu His Leu Leu Pro Ala Leu Lys Gly Ser Phe
      100            105            110
Pro Ala Ser Val Leu Ser
      115

```

&lt;210&gt; 6093

&lt;211&gt; 1998

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6093

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960

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 1998

&lt;210&gt; 6094

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6094

Met	Ile	Met	Ser	Ala	Phe	Arg	Arg	Glu	Ser	Pro	Pro	Thr	Ser	Val	Pro
1				5				10						15	
Pro	Gln	Met	Gly	Ile	Tyr	Leu	Asp	Leu	Cys	Gly	Ser	Phe	Ser	Ala	Glu
			20					25						30	
Thr	Gly	Pro	Val	Ser	Gln	Ser	Phe	Leu	Gln	Met	Leu	Ile	Gly	Val	Cys
			35					40						45	
Trp	Asn	Pro	Lys	Pro	Leu	Pro	Arg	Leu	Gln	Ala	Pro	Asp	Gly	Leu	Leu
			50					55						60	
Ser	Cys	Asn	Phe	Leu	Gly	Glu	Glu	Thr	Phe	Ser	Ser	Phe	Pro	Phe	Leu
65					70					75				80	
Val	His	Pro	Cys	Thr	Leu	Val	Leu	Ser	Gln	Pro	Leu	Pro	His	Ile	Val

```

      85              90              95
Pro Asp Ser Arg Gly Thr Ser Ser Leu His Arg Ala Ala Ala Ala Gly
      100          105          110
Leu Arg Ala Glu Pro Val Gly Ala Glu Ala Leu Ala Pro Glu Val Gln
      115          120          125
Pro Leu Ser Leu Gly Pro Leu Gly
      130          135

```

&lt;210&gt; 6095

&lt;211&gt; 441

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6095

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441

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&lt;210&gt; 6096

&lt;211&gt; 97

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6096

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Met Ala Asp Val Glu Asp Gly Glu Glu Thr Cys Ala Leu Ala Ser His
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Ser Gly Ser Ser Gly Ser Lys Ser Gly Gly Asp Lys Met Phe Ser Leu
      20          25          30
Lys Lys Trp Asn Ala Val Ala Met Trp Ser Trp Asp Val Glu Cys Asp
      35          40          45
Thr Cys Ala Ile Cys Arg Val Gln Val Met Val Val Trp Gly Glu Cys
      50          55          60
Asn His Ser Phe His Asn Cys Cys Met Ser Leu Trp Val Lys Gln Asn
      65          70          75          80
Asn Arg Cys Pro Leu Cys Gln Gln Asp Trp Val Val Gln Arg Ile Gly
      85          90          95
Lys

```

&lt;210&gt; 6097

&lt;211&gt; 2404

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6097

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 2400  
 gctt  
 2404

&lt;210&gt; 6098

&lt;211&gt; 631

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6098

Arg	Phe	Val	Ala	Arg	Glu	Lys	Ile	Met	Ser	Val	Leu	Ser	Glu	Trp	Gly
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Leu	Phe	Arg	Gly	Leu	Gln	Asn	His	Pro	Met	Val	Leu	Pro	Ile	Cys	Ser
		20					25					30			
Arg	Ser	Gly	Asp	Val	Ile	Glu	Tyr	Leu	Leu	Lys	Asn	Gln	Trp	Phe	Val
	35					40					45				
Arg	Cys	Gln	Glu	Met	Gly	Ala	Arg	Ala	Ala	Lys	Ala	Val	Glu	Ser	Gly
	50				55					60					
Ala	Leu	Glu	Leu	Ser	Pro	Ser	Phe	His	Gln	Lys	Asn	Trp	Gln	His	Trp
65				70					75				80		
Phe	Ser	His	Ile	Gly	Asp	Trp	Cys	Val	Ser	Arg	Gln	Leu	Trp	Trp	Gly
		85				90						95			
His	Gln	Ile	Pro	Ala	Tyr	Leu	Val	Xaa	Xaa	Gly	Pro	Cys	Ala	Xaa	Gly
	100					105					110				
Glu	Glu	Xaa	Thr	Cys	Trp	Val	Val	Gly	Arg	Ser	Gly	Ala	Glu	Ala	Arg

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      115      120      125
Glu Leu Ala Ala Glu Leu Thr Gly Arg Gln Gly Ala Glu Pro Thr Leu
      130      135      140
Glu Arg Asp Pro Asp Val Leu Asp Thr Trp Phe Ser Ser Ala Leu Phe
145      150      155      160
Pro Phe Ser Ala Leu Gly Trp Pro Gln Glu Thr Pro Asp Leu Ala Arg
      165      170      175
Phe Tyr Pro Leu Ser Leu Leu Glu Thr Gly Ser Asp Leu Leu Leu Phe
      180      185      190
Trp Val Gly Arg Met Val Met Leu Gly Thr Gln Leu Thr Gly Gln Leu
      195      200      205
Pro Phe Ser Lys Val Leu Leu His Pro Met Val Arg Asp Arg Gln Gly
      210      215      220
Arg Lys Met Ser Lys Ser Leu Gly Asn Val Leu Asp Pro Arg Asp Ile
225      230      235      240
Ile Ser Gly Val Glu Met Gln Leu Leu Gln Glu Lys Leu Arg Ser Gly
      245      250      255
Asn Leu Asp Pro Ala Glu Leu Ala Ile Val Ala Ala Ala Gln Lys Lys
      260      265      270
Asp Phe Pro His Gly Ile Pro Glu Cys Gly Thr Asp Ala Leu Arg Phe
      275      280      285
Thr Leu Cys Ser His Gly Val Gln Ala Gly Asp Leu His Leu Ser Val
      290      295      300
Ser Glu Val Gln Ser Cys Arg His Phe Cys Asn Lys Ile Trp Asn Ala
305      310      315      320
Leu Arg Phe Ile Leu Asn Ala Leu Gly Glu Lys Phe Val Pro Gln Pro
      325      330      335
Ala Glu Glu Leu Ser Pro Ser Ser Pro Met Asp Ala Trp Ile Leu Ser
      340      345      350
Arg Leu Ala Leu Ala Ala Gln Glu Cys Glu Arg Gly Phe Leu Thr Arg
      355      360      365
Glu Leu Ser Leu Val Thr His Ala Leu His His Phe Trp Leu His Asn
      370      375      380
Leu Cys Asp Val Tyr Leu Glu Ala Val Lys Pro Val Leu Trp His Ser
385      390      395      400
Pro Arg Pro Leu Gly Pro Pro Gln Val Leu Phe Ser Cys Ala Asp Leu
      405      410      415
Gly Leu Arg Leu Leu Ala Pro Leu Met Pro Phe Leu Ala Glu Glu Leu
      420      425      430
Trp Gln Arg Leu Pro Pro Arg Pro Gly Cys Pro Pro Ala Pro Ser Ile
      435      440      445
Ser Val Ala Pro Tyr Pro Ser Ala Cys Ser Leu Glu His Trp Arg Gln
      450      455      460
Pro Glu Leu Glu Arg Arg Phe Ser Arg Val Gln Glu Val Val Gln Val
465      470      475      480
Leu Arg Ala Leu Arg Ala Thr Tyr Gln Leu Thr Lys Ala Arg Pro Arg
      485      490      495
Val Leu Leu Gln Ser Ser Glu Pro Gly Asp Gln Gly Leu Phe Glu Ala
      500      505      510
Phe Leu Glu Pro Leu Gly Thr Leu Gly Tyr Cys Gly Ala Val Gly Leu
      515      520      525
Leu Pro Pro Gly Thr Ala Ala Pro Ser Gly Trp Ala Gln Ala Pro Leu
      530      535      540
Ser Asp Thr Ala Gln Val Tyr Met Glu Leu Gln Gly Leu Val Asp Pro

```

```

545          550          555          560
Gln Ile Gln Leu Pro Leu Leu Ala Ala Arg Arg Tyr Lys Leu Gln Lys
          565          570          575
Gln Leu Asp Ser Leu Thr Ala Arg Thr Pro Ser Glu Gly Glu Ala Gly
          580          585          590
Thr Gln Arg Gln Gln Lys Leu Ser Ser Leu Gln Leu Glu Leu Ser Lys
          595          600          605
Leu Asp Lys Ala Ala Ser His Leu Arg Gln Leu Met Asp Glu Pro Pro
          610          615          620
Ala Pro Gly Ser Pro Glu Leu
625          630

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&lt;210&gt; 6099

&lt;211&gt; 3957

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6099

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accatcgcca agggcaactt cgcggtggtc aagcgggcca cgcacctcgt caccaaggcc
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1080

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2700



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&lt;210&gt; 6100

&lt;211&gt; 1102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6100

Gly Ala Ala Gly Ala Gly Thr Gly Gly Ala Gly Pro Ala Gly Arg Leu  
 1 5 10 15  
 Leu Pro Pro Pro Ala Pro Gly Ser Pro Ala Ala Pro Ala Ala Val Ser  
 20 25 30  
 Pro Ala Ala Gly Gln Pro Arg Pro Pro Ala Pro Ala Ser Arg Gly Pro

```

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Met Pro Ala Arg Ile Gly Tyr Tyr Glu Ile Asp Arg Thr Ile Gly Lys
  50      55      60
Gly Asn Phe Ala Val Val Lys Arg Ala Thr His Leu Val Thr Lys Ala
  65      70      75      80
Lys Val Ala Ile Lys Ile Ile Asp Lys Thr Gln Leu Asp Glu Glu Asn
      85      90      95
Leu Lys Lys Ile Phe Arg Glu Val Gln Ile Met Lys Met Leu Cys His
      100      105      110
Pro His Ile Ile Arg Leu Tyr Gln Val Met Glu Thr Glu Arg Met Ile
      115      120      125
Tyr Leu Val Thr Glu Tyr Ala Ser Gly Gly Glu Ile Phe Asp His Leu
      130      135      140
Val Ala His Gly Arg Met Ala Glu Lys Glu Ala Arg Arg Lys Phe Lys
      145      150      155      160
Gln Ile Val Thr Ala Val Tyr Phe Cys His Cys Arg Asn Ile Val His
      165      170      175
Arg Asp Leu Lys Ala Glu Asn Leu Leu Leu Asp Ala Asn Leu Asn Ile
      180      185      190
Lys Ile Ala Asp Phe Gly Phe Ser Asn Leu Phe Thr Pro Gly Gln Leu
      195      200      205
Leu Lys Thr Trp Cys Gly Ser Pro Pro Tyr Ala Ala Pro Glu Leu Phe
      210      215      220
Glu Gly Lys Glu Tyr Asp Gly Pro Lys Val Asp Ile Trp Ser Leu Gly
      225      230      235      240
Val Val Leu Tyr Val Leu Val Cys Gly Ala Leu Pro Phe Asp Gly Ser
      245      250      255
Thr Leu Gln Asn Leu Arg Ala Arg Val Leu Ser Gly Lys Phe Arg Ile
      260      265      270
Pro Phe Phe Met Ser Thr Glu Cys Glu His Leu Ile Arg His Met Leu
      275      280      285
Val Leu Asp Pro Asn Lys Arg Leu Ser Met Glu Gln Ile Cys Lys His
      290      295      300
Lys Trp Met Lys Leu Gly Asp Ala Asp Pro Asn Phe Asp Arg Leu Ile
      305      310      315      320
Ala Glu Cys Gln Gln Leu Lys Glu Glu Arg Gln Val Asp Pro Leu Asn
      325      330      335
Glu Asp Val Leu Leu Ala Met Glu Asp Met Gly Leu Asp Lys Glu Gln
      340      345      350
Thr Leu Gln Ala Glu Gln Ala Gly Thr Ala Met Asn Ile Ser Val Pro
      355      360      365
Gln Val Gln Leu Ile Asn Pro Glu Asn Gln Ile Val Glu Pro Asp Gly
      370      375      380
Thr Leu Asn Leu Asp Ser Asp Glu Gly Glu Glu Pro Ser Pro Glu Ala
      385      390      395      400
Leu Val Arg Tyr Leu Ser Met Arg Arg His Thr Val Gly Val Ala Asp
      405      410      415
Pro Arg Thr Glu Val Met Glu Asp Leu Gln Lys Leu Leu Pro Gly Phe
      420      425      430
Pro Gly Val Asn Pro Gln Ala Pro Phe Leu Gln Val Ala Pro Asn Val
      435      440      445
Asn Phe Met His Asn Leu Leu Pro Met Gln Asn Leu Gln Pro Thr Gly
      450      455      460
Gln Leu Glu Tyr Lys Glu Gln Ser Leu Leu Gln Pro Pro Thr Leu Gln

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465                      470                      475                      480  
 Leu Leu Asn Gly Met Gly Pro Leu Gly Arg Arg Ala Ser Asp Gly Gly  
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 Ala Asn Ile Gln Leu His Ala Gln Gln Leu Leu Lys Arg Pro Arg Gly  
                                  500                      505                      510  
 Pro Ser Pro Leu Val Thr Met Thr Pro Ala Val Pro Ala Val Thr Pro  
                                  515                      520                      525  
 Val Asp Glu Glu Ser Ser Asp Gly Glu Pro Asp Gln Glu Ala Val Gln  
                                  530                      535                      540  
 Ser Ser Thr Tyr Lys Asp Ser Asn Thr Leu His Leu Pro Thr Glu Arg  
 545                      550                      555                      560  
 Phe Ser Pro Val Arg Arg Phe Ser Asp Gly Ala Ala Ser Ile Gln Ala  
                                  565                      570                      575  
 Phe Lys Ala His Leu Glu Lys Met Gly Asn Asn Ser Ser Ile Lys Gln  
                                  580                      585                      590  
 Leu Gln Gln Glu Cys Glu Gln Leu Gln Lys Met Tyr Gly Gly Gln Ile  
                                  595                      600                      605  
 Asp Glu Arg Thr Leu Glu Lys Thr Gln Gln Gln His Met Leu Tyr Gln  
                                  610                      615                      620  
 Gln Glu Gln His His Gln Ile Leu Gln Gln Gln Ile Gln Asp Ser Ile  
 630                      635                      640  
 Cys Pro Pro Gln Pro Ser Pro Pro Leu Gln Ala Ala Cys Glu Asn Gln  
                                  645                      650                      655  
 Pro Ala Leu Leu Thr His Gln Leu Gln Arg Leu Arg Ile Gln Pro Ser  
                                  660                      665                      670  
 Ser Pro Pro Pro Asn His Pro Asn Asn His Leu Phe Arg Gln Pro Ser  
                                  675                      680                      685  
 Asn Ser Pro Pro Pro Met Ser Ser Ala Met Ile Gln Pro His Gly Ala  
                                  690                      695                      700  
 Ala Ser Ser Ser Gln Phe Gln Gly Leu Pro Ser Arg Ser Ala Ile Phe  
 705                      710                      715                      720  
 Gln Gln Gln Pro Glu Asn Cys Ser Ser Pro Pro Asn Val Ala Leu Thr  
                                  725                      730                      735  
 Cys Leu Gly Met Gln Gln Pro Ala Gln Ser Gln Gln Val Thr Ile Gln  
                                  740                      745                      750  
 Val Gln Glu Pro Val Asp Met Leu Ser Asn Met Pro Gly Thr Ala Ala  
                                  755                      760                      765  
 Gly Ser Ser Gly Arg Gly Ile Ser Ile Ser Pro Ser Ala Gly Gln Met  
                                  770                      775                      780  
 Gln Met Gln His Arg Thr Asn Leu Met Ala Thr Leu Ser Tyr Gly His  
 785                      790                      795                      800  
 Arg Pro Leu Ser Lys Gln Leu Ser Ala Asp Ser Ala Glu Ala His Ser  
                                  805                      810                      815  
 Leu Asn Val Asn Arg Phe Ser Pro Ala Asn Tyr Asp Gln Ala His Leu  
                                  820                      825                      830  
 His Pro His Leu Phe Ser Asp Gln Ser Arg Gly Ser Pro Ser Ser Tyr  
                                  835                      840                      845  
 Ser Pro Ser Thr Gly Val Gly Phe Ser Pro Thr Gln Ala Leu Lys Val  
                                  850                      855                      860  
 Pro Pro Leu Asp Gln Phe Pro Thr Phe Pro Pro Ser Ala His Gln Gln  
 865                      870                      875                      880  
 Pro Pro His Tyr Thr Thr Ser Ala Leu Gln Gln Ala Leu Leu Ser Pro  
                                  885                      890                      895  
 Thr Pro Pro Asp Tyr Thr Arg His Gln Gln Val Pro His Ile Leu Gln

900 905 910  
 Gly Leu Leu Ser Pro Arg His Ser Leu Thr Gly ~~His Ser Asp Ile Arg~~  
 915 920 925  
 Leu Pro Pro Thr Glu Phe Ala Gln Leu Ile Lys Arg Gln Gln Gln  
 930 935 940  
 Arg Gln Gln Gln Gln Gln Gln Gln Gln Gln Glu Tyr Gln Glu Leu  
 945 950 955 960  
 Phe Arg His Met Asn Gln Gly Asp Ala Gly Ser Leu Ala Pro Ser Leu  
 965 970 975  
 Gly Gly Gln Ser Met Thr Glu Arg Gln Ala Leu Ser Tyr Gln Asn Ala  
 980 985 990  
 Asp Ser Tyr His His Thr Ile Gln Asn Ser Asp Asp Ala Tyr Val Gln  
 995 1000 1005  
 Leu Asp Asn Leu Pro Gly Met Ser Leu Val Ala Gly Lys Ala Leu Ser  
 1010 1015 1020  
 Ser Ala Arg Met Ser Asp Ala Val Leu Ser Gln Ser Ser Leu Met Gly  
 1025 1030 1035 1040  
 Ser Gln Gln Phe Gln Asp Gly Glu Asn Glu Glu Cys Gly Ala Ser Leu  
 1045 1050 1055  
 Gly Gly His Glu His Pro Asp Leu Ser Asp Gly Ser Gln His Leu Asn  
 1060 1065 1070  
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 1075 1080 1085  
 Lys His Pro Glu Val Ser Phe Ser Met Glu Gln Ala Gly Val  
 1090 1095 1100

<210> 6101  
 <211> 1447  
 <212> DNA  
 <213> Homo sapiens

<400> 6101  
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 catctagaaa tatactccgt gatctttctt gatggccaga ctgtgtaaaa ttcatacagt  
 180  
 gtttactaca gggatcccca aatattgtta gttgaatgaa caaacacaca tttcaaggag  
 240  
 ggcactacag tgagtagatg aacagttttc tgataggaga ttgtacaagt aatgttttca  
 300  
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 600  
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 720  
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 780  
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 840  
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&lt;210&gt; 6102

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6102

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Val	Ala	Tyr	Arg	Ser	Ser	His	Gly	Asp	Leu	Arg	Pro	Arg	Ala	Ser	Ala
			20					25					30		
Leu	Ala	Met	Val	Ser	Gly	Asp	Gly	Phe	Leu	Val	Ser	Arg	Pro	Glu	Ala
		35				40					45				
Ile	His	Leu	Gly	Pro	Arg	Gln	Ala	Val	Arg	Pro	Ser	Val	Arg	Ala	Glu
		50			55						60				
Ser	Arg	Arg	Val	Asp	Gly	Gly	Gly	Arg	Ser	Pro	Arg	Glu	Pro	Asp	Gly
65				70				75						80	
Arg	Gly	Arg	Ser	Arg	Gln	Ala	Arg	Phe	Ser	Pro	Tyr	Pro	Ile	Pro	Ala
			85				90						95		
Val	Glu	Pro	Asp	Leu	Leu	Arg	Ser	Val	Leu	Gln	Gln	Arg	Leu	Ile	Ala
			100				105						110		
Leu	Gly	Gly	Val	Ile	Ala	Ala	Arg	Ile	Ser	Val					
		115					120								

&lt;210&gt; 6103

&lt;211&gt; 309

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6103

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 120  
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 180  
 gacggcttcg tctgaaccg cctgcagtac gccgtcatca gtgaggcctg gagactggtg  
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 300  
 cggtacgcg  
 309

&lt;210&gt; 6104

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6104

Glu	Thr	Ala	Pro	Ala	Thr	Met	Asp	Arg	Thr	Tyr	Ala	Leu	Met	Lys	Lys
1				5					10					15	
Ile	Gly	Gln	Ser	Pro	Val	Arg	Val	Leu	Lys	Glu	Ile	Asp	Gly	Phe	Val
			20					25					30		
Leu	Asn	Arg	Leu	Gln	Tyr	Ala	Val	Ile	Ser	Glu	Ala	Trp	Arg	Leu	Val
			35				40					45			
Glu	Glu	Glu	Ile	Val	Ser	Pro	Ser	Asp	Leu	Asp	Leu	Val	Met	Ser	Asp
			50				55					60			
Gly	Leu	Gly	Met	Arg	Tyr	Ala									
65							70								

&lt;210&gt; 6105

&lt;211&gt; 1846

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6105

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 gggatgaagt ggtgtctccc ctccatctg ctctgcaggg gtccctcagg ctcctatca  
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 gccctccag ctgcctcagt tatctctgca ccccatctt cctcctccg acatcgcaaa  
 240  
 cgtcgagga cttccagcaa gtcggaggca ggggctaggg gtggaggcca gggttccaag  
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 gaaaagggcc gagggagttg gggaggccgc caccaccacc accaccact gcctgcagca  
 360  
 ggcttcaaaa agcaacagcg caagttccag tatgggaatt attgcaaata ctatgggtac  
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cgcaatcctt cctgtgagga tgggcgcctt cgggtgttga agcctgagtg gtttcggggc  
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1320  
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1380  
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1440  
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1680  
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1800  
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa  
1846

&lt;210&gt; 6106

&lt;211&gt; 405

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

<400> 6106  
 Xaa Pro Ala Ala Ala Gly Ser Leu Thr Pro Arg Gly Gly Arg Leu Thr  
 1 5 10 15  
 Ala Ala Ala Ala Gln Gly Pro Glu Pro Gly Met Pro Pro Asn Pro Met  
 20 25 30  
 Asn Ser Thr Gln Pro Ser Thr Ala Gly Met Lys Trp Cys Leu Pro Phe  
 35 40 45  
 His Leu Leu Cys Arg Gly Pro Ser Gly Ser Leu Ser Ala Pro Pro Ala  
 50 55 60  
 Ala Ser Val Ile Ser Ala Pro Pro Ser Ser Ser Arg His Arg Lys  
 65 70 75 80  
 Arg Arg Arg Thr Ser Ser Lys Ser Glu Ala Gly Ala Arg Gly Gly Gly  
 85 90 95  
 Gln Gly Ser Lys Glu Lys Gly Arg Gly Ser Trp Gly Gly Arg His His  
 100 105 110  
 His His His Pro Leu Pro Ala Ala Gly Phe Lys Lys Gln Gln Arg Lys  
 115 120 125  
 Phe Gln Tyr Gly Asn Tyr Cys Lys Tyr Tyr Gly Tyr Arg Asn Pro Ser  
 130 135 140  
 Cys Glu Asp Gly Arg Leu Arg Val Leu Lys Pro Glu Trp Phe Arg Gly  
 145 150 155 160  
 Arg Asp Val Leu Asp Leu Gly Cys Asn Val Gly His Leu Thr Leu Ser  
 165 170 175  
 Ile Ala Cys Lys Trp Gly Pro Ser Arg Met Val Gly Leu Asp Ile Asp  
 180 185 190  
 Ser Arg Leu Ile His Ser Ala Arg Gln Asn Ile Arg His Tyr Leu Ser  
 195 200 205  
 Glu Glu Leu Arg Leu Pro Pro Gln Thr Leu Glu Gly Asp Pro Gly Ala  
 210 215 220  
 Glu Gly Glu Glu Gly Thr Thr Val Arg Lys Arg Ser Cys Phe Pro  
 225 230 235 240  
 Ala Ser Leu Thr Ala Ser Arg Gly Pro Ile Ala Ala Pro Gln Val Pro  
 245 250 255  
 Leu Asp Gly Ala Asp Thr Ser Val Phe Pro Asn Asn Val Val Phe Val  
 260 265 270  
 Thr Gly Asn Tyr Val Leu Asp Arg Asp Asp Leu Val Glu Ala Gln Thr  
 275 280 285  
 Pro Glu Tyr Asp Val Val Leu Cys Leu Ser Leu Thr Lys Trp Val His  
 290 295 300  
 Leu Asn Trp Gly Asp Glu Gly Leu Lys Arg Met Phe Arg Arg Ile Tyr  
 305 310 315 320  
 Arg His Leu Arg Pro Gly Gly Ile Leu Val Leu Glu Pro Gln Pro Trp  
 325 330 335  
 Ser Ser Tyr Gly Lys Arg Lys Thr Leu Thr Glu Thr Ile Tyr Lys Asn  
 340 345 350  
 Tyr Tyr Arg Ile Gln Leu Lys Pro Glu Gln Phe Ser Ser Tyr Leu Thr  
 355 360 365  
 Ser Pro Asp Val Gly Phe Ser Ser Tyr Glu Leu Val Ala Thr Pro His  
 370 375 380  
 Asn Thr Ser Lys Gly Phe Gln Arg Pro Val Tyr Leu Phe His Lys Ala  
 385 390 395 400  
 Arg Ser Pro Ser His  
 405



&lt;210&gt; 6107

&lt;211&gt; 896

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6107

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nnaaatttga cccgcacagt gatgaggcca gggctgggag ggaggcaggg tctatcctca
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120
tggatgtcaa ggagatgctc aaggctgggc tcaacaccac cccagctcc agcctcccca
180
gtggagtctc cccgaacctc acccgctctc tcagccttct catcattacc ctctgatgga
240
tgggggagtt cagttggctc ggggttgctt tggcctgcca ccaggtggtc cacatgcccc
300
aggtggagga cggatgtgtc gcctgctgac acaatagcgc ccaggagctg gttgctaccg
360
ctgtctgcta cgtaggtaga gagccaagct aggaccaagg ctagaatcag caccaccaca
420
cctgccacca ccatcacctc attaccacaca ccctcaatga gggtgacatc agtgaccccc
480
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540
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600
ccaaaagcgg aaccttcgcc tcagaaaaag ggtgcgggac ccctcctcac cgtgcggtca
660
cggtacggac agggtagatc acaggctgag ggacagagca aagaccctg aggccggaca
720
cctgggggtc tgccggggcc ctcccacga gagttccctg tgtctgtgcc aatcgttttc
780
gtctttcttt gccgcagttt cttttcctgt aaatcatggt taatgacatt aaccttctta
840
ccatcagggg ttagttgtgg ttgtgataaa taattactac cgttattaag caattg
896

```

&lt;210&gt; 6108

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6108

```

Xaa Asn Leu Thr Arg Thr Val Met Arg Pro Gly Leu Gly Gly Arg Gln
1      5      10      15
Gly Leu Ser Ser Asp Leu Arg Gly Ala Ser Gly Leu Leu Leu Pro Ala
20      25      30
Pro Ala Cys Leu Leu Gly Arg Pro Trp Met Ser Arg Arg Cys Ser Arg
35      40      45
Leu Gly Ser Thr Pro Pro Pro Ala Pro Ala Ser Pro Val Glu Ser Pro
50      55      60
Arg Pro Ser Pro Ala Ser Ser Ala Phe Ser Ser Leu Pro Ser Asp Gly
65      70      75      80
Trp Gly Ser Ser Val Gly Ser Gly Leu Pro Trp Pro Ala Thr Arg Trp

```

	85		90		95										
Ser	Thr	Cys	Pro	Arg	Trp	Arg	Thr	Asp	Val	Ser	Pro	Ala	Asp	Thr	Ile
		100						105					110		
Ala	Pro	Arg	Ser	Trp	Leu	Leu	Pro	Leu	Ser	Ala	Thr				
	115						120								

&lt;210&gt; 6109

&lt;211&gt; 2087

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6109

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gctaccagaa gcatcatggg gccctgggga gagccagagc tcctggtgtg gcgccccgag
120
ggtagcttca gagcctccag tgctgtggg gctggagggtg aagttggggg ccctggtgct
180
gctgctggtc tcaccctcct ctgcagcctg gtgccatct gtgtgctgcg ccggccagga
240
gctaaccatg aaggtccagc ttcccgccag aaagccctga gcctagtaag ctgtttcgcg
300
gggggcgtct ttttgccac ttgtctctg gacctgctgc ctgactacct ggctgccata
360
gatgaggccc tggcagcctt gcacgtgacg ctccagtcc cactgcaaga gttcatcctg
420
gccatgggct tcttctgggt cctggtgatg gagcagatca cactggctta caaggagcag
480
tcagggcgt cactctgga ggaacaagg gctctgctgg gaacagtga tggtagggcg
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cagcattggc atgatgggccc aggggtccca caggcgagtg gagccccagc aacccccca
600
gccttgctg cctgtgtact ggtgttctcc ctggccctcc actccgtgtt cgaggggctg
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780
caggtggtgg ctggctgtgg gacccctctc tcatgcatga cacctctagg catcgggctg
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900
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960
gccagttctg agcaaaggat cctcaaggtc attctgctcc tagcaggctt tgccctgctc
1020
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1080
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1140
agggaaatac tgaggaccaa aaagttctct gggagctaaa gatagagcct ttggggctat
1200
ctgactaatg agagggaagt gggcagacaa gaggtgggcc ccagtcccaa ggaacaagag
1260

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atggtcaagt cgctagagac atatcagggg acattaggat tggggaagac acttgactgc  
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 tagaatcaga ggttggacac tatacataag gacaggctca catgggaggc tggaggtggg  
 1380  
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 1680  
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 1980  
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 2040  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa  
 2087

&lt;210&gt; 6110

&lt;211&gt; 323

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6110

Met	Gly	Pro	Trp	Gly	Glu	Pro	Glu	Leu	Leu	Val	Trp	Arg	Pro	Glu	Gly
1				5				10						15	
Ser	Phe	Arg	Ala	Ser	Ser	Ala	Cys	Gly	Ala	Gly	Gly	Glu	Val	Gly	Gly
			20					25					30		
Pro	Gly	Ala	Ala	Ala	Gly	Leu	Thr	Leu	Leu	Cys	Ser	Leu	Val	Pro	Ile
			35				40					45			
Cys	Val	Leu	Arg	Arg	Pro	Gly	Ala	Asn	His	Glu	Gly	Ser	Ala	Ser	Arg
			50				55				60				
Gln	Lys	Ala	Leu	Ser	Leu	Val	Ser	Cys	Phe	Ala	Gly	Gly	Val	Phe	Leu
65					70					75				80	
Ala	Thr	Cys	Leu	Leu	Asp	Leu	Leu	Pro	Asp	Tyr	Leu	Ala	Ala	Ile	Asp
			85						90					95	
Glu	Ala	Leu	Ala	Ala	Leu	His	Val	Thr	Leu	Gln	Phe	Pro	Leu	Gln	Glu
			100					105					110		
Phe	Ile	Leu	Ala	Met	Gly	Phe	Phe	Leu	Val	Leu	Val	Met	Glu	Gln	Ile
			115				120					125			
Thr	Leu	Ala	Tyr	Lys	Glu	Gln	Ser	Gly	Pro	Ser	Pro	Leu	Glu	Glu	Thr
			130				135					140			
Arg	Ala	Leu	Leu	Gly	Thr	Val	Asn	Gly	Gly	Pro	Gln	His	Trp	His	Asp

145                      150                      155                      160  
 Gly Pro Gly Val Pro Gln Ala Ser Gly Ala Pro Ala Thr Pro Ser Ala  
                                  165                      170                      175  
 Leu Arg Ala Cys Val Leu Val Phe Ser Leu Ala Leu His Ser Val Phe  
                                  180                      185                      190  
 Glu Gly Leu Ala Val Gly Leu Gln Arg Asp Arg Ala Arg Ala Met Glu  
                                  195                      200                      205  
 Leu Cys Leu Ala Leu Leu Leu His Lys Gly Ile Leu Ala Val Ser Leu  
                                  210                      215                      220  
 Ser Leu Arg Leu Leu Gln Ser His Leu Arg Ala Gln Val Val Ala Gly  
 225                                   230                                   235                                   240  
 Cys Gly Ile Leu Phe Ser Cys Met Thr Pro Leu Gly Ile Gly Leu Gly  
                                  245                                   250                                   255  
 Ala Ala Leu Ala Glu Ser Ala Gly Pro Leu His Gln Leu Ala Gln Ser  
                                  260                                   265                                   270  
 Val Leu Glu Gly Met Ala Ala Gly Thr Phe Leu Tyr Ile Thr Phe Leu  
                                  275                                   280                                   285  
 Glu Ile Leu Pro Gln Glu Leu Ala Ser Ser Glu Gln Arg Ile Leu Lys  
                                  290                                   295                                   300  
 Val Ile Leu Leu Leu Ala Gly Phe Ala Leu Leu Thr Gly Leu Leu Phe  
 305                                   310                                   315                                   320  
 Ile Gln Ile

&lt;210&gt; 6111

&lt;211&gt; 1706

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6111

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 ccagccaaga aattctttat atgtagatac tattttcttg tcaagttcag atgttgga  
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 180  
 tgttttatat cttttatgtc tttattttgt ttgtttttgt ttttgagatg gagtttccct  
 240  
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 360  
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 960  
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 1020  
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 1080  
 aatcacccca tgtaggtgta cattgtgaca aagtgcattt gaccactaag gggccccctt  
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 1260  
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 1380  
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 1560  
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 1620  
 gctgtgtcac tctcctccc cccagtgct ttgtagtctc tcctatgtca taataaagct  
 1680  
 acattttctc tgaaaaaaaa aaaaaa  
 1706

&lt;210&gt; 6112

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6112

Met	Ser	Leu	Phe	Cys	Phe	Val	Leu	Phe	Leu	Arg	Trp	Ser	Phe	Pro	Leu
1				5					10					15	
Val	Ala	Gln	Ala	Gly	Val	Xaa	Trp	His	Ser	Leu	Gly	Ser	Leu	Gln	Pro
			20					25					30		
Pro	Leu	Pro	Gly	Phe	Lys	Gln	Phe	Ser	Cys	Arg	Ser	Leu	Pro	Ser	Ser
			35				40					45			
Trp	Asp	Tyr	Arg	His	Ala	Pro	Pro	Arg	Gln	Ala	Asn	Phe	Cys	Ile	Phe
	50					55					60				
Ser	Arg	Asp	Gly	Val	Ser	Pro	Cys	Trp	Pro	Gly	Trp	Ser	Gln	Thr	Pro
65					70					75				80	
Asp	Leu	Arg	Arg	Ser	Thr	His	Leu	Ser	Val	Pro	Lys	Cys	Trp	Asp	Tyr
				85					90					95	
Arg	Arg	Glu	Pro	Pro	His	Leu	Ala	Tyr	Glu	Trp	Ser	Phe	Asn		

100

105

110

&lt;210&gt; 6113

&lt;211&gt; 1095

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6113

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60  
ggtgacgcac ttacggcgg cagcgtaagt gcgtgacgct cgtcagtggc ttcagttcac  
120  
acgtggcgcc agcggaggca ggttgatgtg tttgtgcttc cttctacagc caatatgaaa  
180  
aggcctagta agtggggtcg ggaggcgggc gtggaggggac ccacgtctgg aagttgctgc  
240  
agccaccacg acgctcttct acggctacgg ctttgtctct gctggtatgg gggtagggagc  
300  
atacgcgtag gccttgggcc tatttctctg tagaaccgag agttggaagt ccctacggcg  
360  
atcatgttaa ccgcgcgggc tcattctgct gaacgaagcc gggcagaggg tggggaagac  
420  
taggctagat tttcgtaagg aagcagcgtc tgagccaggt ttgaggccca atattttctt  
480  
tccgtggcca cgtgcagact ggcccagggt agagctgaga atcgctccc agactcagtg  
540  
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600  
atacgtctgt gtgtatgatc ccatttcta attgtagagg taagtgcagg gaattttgac  
660  
tccattcttg atctactgaa ttttaattctc tgggatttga aagtagcacg tatgtttgca  
720  
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780  
ataactccat agtgcgttaa ccagaaacta atcatttggg ttaacagatt tgtgatgtgt  
840  
ttctttgtag agttaagaa agcaagtaaa cgcattgacct gccataagcg gtataaaatc  
900  
caaaaaaagg ttcgagaaca tcatcgaaaa ttaagaaagg aggctaaaaa gcgggggtcac  
960  
aagaagccta ggaaagaccc aggagtcca aacagtgtc cctttaagga ggctcttctt  
1020  
gaggaagctg agctaaggaa acagaggctt gaagaactaa aacagcagca gaaacttgac  
1080  
aggcagaagg aacta  
1095

&lt;210&gt; 6114

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6114

Met Cys Phe Phe Val Glu Leu Lys Lys Ala Ser Lys Arg Met Thr Cys

```

      1             5             10             15
His Lys Arg Tyr Lys Ile Gln Lys Lys Val Arg Glu His His Arg Lys
      20             25             30
Leu Arg Lys Glu Ala Lys Lys Arg Gly His Lys Lys Pro Arg Lys Asp
      35             40             45
Pro Gly Val Pro Asn Ser Ala Pro Phe Lys Glu Ala Leu Leu Glu Glu
      50             55             60
Ala Glu Leu Arg Lys Gln Arg Leu Glu Glu Leu Lys Gln Gln Gln Lys
      65             70             75             80
Leu Asp Arg Gln Lys Glu Leu
      85

```

&lt;210&gt; 6115

&lt;211&gt; 411

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6115

```

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60
gccgccgccc gcagccctcc ttctcgtggg cgctggggaa gaaactcgtc ggcggggtcta
120
actgtggcgt cccagggcgg tggagggagc aacttcgggg gcacgtcttc gtaaattccc
180
tggaggacac tgacctgta cccaccctc gaggccagaa gtcggttcct ttgggggaac
240
tgaggggcca gagcactcgc cccctgact tgcaaagttg gcgtctttac ttggcctccg
300
ggattctgcg catggcgtgt ctccaggctg ctgatgggca agacagatgt gccaggtcca
360
gaatgaactt gagaagagtt tgtagccatt cctgaatcac cttatactag t
411

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&lt;210&gt; 6116

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6116

```

Met Ala Thr Asn Ser Ser Gln Val His Ser Gly Pro Gly Thr Ser Val
      1             5             10             15
Leu Pro Ile Ser Ser Leu Glu Thr Arg His Ala Gln Asn Pro Gly Gly
      20             25             30
Gln Val Lys Thr Pro Thr Leu Gln Val Arg Gly Ala Ser Ala Leu Ala
      35             40             45
Pro Gln Phe Pro Gln Arg Asn Arg Leu Leu Ala Ser Arg Val Gly Tyr
      50             55             60
Arg Val Ser Val Leu His Gly Ile Tyr Glu Asp Val Pro Pro Lys Leu
      65             70             75             80
Leu Pro Pro Pro Pro Trp Asp Ala Thr Val Arg Pro Ala Asp Glu Phe
      85             90             95
Leu Pro Gln Arg Pro Arg Glu Gly Gly Leu Arg Ala Ala Ala Ala
      100            105            110
Thr Gly Gly Glu Ala Ser Ala Gly Asn Leu Gly Pro Gly Gly Ala Arg

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115 120 125

Arg

<210> 6117  
 <211> 962  
 <212> DNA  
 <213> Homo sapiens

<400> 6117  
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 120  
 tcgggaggcg acaagatgtt ctccctcaag aagtggaaac cggtggccat gtggagctgg  
 180  
 gacgtggagt gcgatacgtg gcgcctctgc agggctccagg tgatggatgc ctgtcttaga  
 240  
 tgtcaagctg aaaacaaaca agaggactgt gttgtggtct ggggagaatg taatcattcc  
 300  
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 360  
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 420  
 ttgttcagag ccctgggtgga tcttgtaatc cagtgcccta caaaggctag aactactacg  
 480  
 gggatgaatt cttcaaatag gagccgatgg atctgtggtc ctttgggact catcaaagcc  
 540  
 ttggttttagc attttgtcag ttttatcttc agaaattctc tgcgattaag aagataattt  
 600  
 attaaagggtg gtccttccta cctctgtggt gtgtgtcgcg cacacagctt agaagtgcta  
 660  
 taataaaggga aagagctcca aattgaatca cctttataat ttaccattt ctatacaaca  
 720  
 ggcagtggaa gcagtttcag agaacttttt gcatgcttat ggttgatcag ttaaaaaaga  
 780  
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 840  
 aatacgtatt tttggcaggg agagggaacg gtccatgaaa tctttatgtg atataaggat  
 900  
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 960  
 aa  
 962

<210> 6118  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 6118  
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 1 5 10 15  
 Ser Gly Ser Ser Gly Ser Lys Ser Gly Gly Asp Lys Met Phe Ser Leu



```

      20      25      30
Lys Lys Trp Asn Ala Val Ala Met Trp Ser Trp Asp Val Glu Cys Asp
      35      40      45
Thr Cys Ala Ile Cys Arg Val Gln Val Met Asp Ala Cys Leu Arg Cys
      50      55      60
Gln Ala Glu Asn Lys Gln Glu Asp Cys Val Val Val Trp Gly Glu Cys
65      70      75      80
Asn His Ser Phe His Asn Cys Cys Met Ser Leu Trp Val Lys Gln Asn
      85      90      95
Asn Arg Cys Pro Leu Cys Gln Gln Asp Trp Val Val Gln Arg Ile Gly
      100      105      110
Lys

```

&lt;210&gt; 6119

&lt;211&gt; 375

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6119

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ccccacacc ccacacggac tgcacggaaa tatcacagta accatctctc agtcacagcg
120
tggtcccccaca gaactcatgc ctgcttgctt taaaccacc aatgaaaact ccccatggga
180
aaactgcttg gataatactt tggaccccaa taaatgcttt aatcccacaa gtcctctgtc
240
tctgctctc tcttgcccct acccactggt tgagcatgtg tgtcccaaac ggccctgcaa
300
ggtgtgctgc cctgttcttt ctgggctctg tcaaggaatc aaactgcttc tgttatgtga
360
tgtgtcatgt tgtgc
375

```

&lt;210&gt; 6120

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6120

```

Met Gly Lys Leu Asp Thr Ala Pro Trp Thr Cys Pro Thr Asp Pro His
1      5      10      15
Thr Pro His Gly Leu His Gly Asn Ile Thr Val Thr Ile Ser Gln Ser
20      25      30
Gln Arg Gly Pro Thr Glu Leu Met Pro Ala Cys Phe Lys Pro Thr Asn
35      40      45
Glu Asn Ser Pro Trp Glu Thr Cys Leu Asp Asn Thr Leu Asp Pro Asn
50      55      60
Lys Cys Phe Asn Pro Thr Ser Pro Leu Ser Leu Pro Leu Ser Cys Pro
65      70      75      80
Tyr Pro Leu Val Glu His Val Cys Pro Lys Arg Pro Cys Lys Val Cys
85      90      95
Cys Pro Val Leu Ser Gly Leu Cys Gln Gly Ile Lys Leu Leu Leu Leu

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100  
Cys Asp Val Ser Cys Cys  
115

105

110

<210> 6121  
<211> 1039  
<212> DNA  
<213> Homo sapiens

<400> 6121  
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120  
aagaaacact ctcttcttgc cacatttgtt ttgagctaaa tattgagggg gtaccaaagt  
180  
ctgatctctt gcacacaaaa tcattaaggg gccataaaga ctgctttgaa aaataccatt  
240  
taattgcaaa ccagggttgt cctcgatcta agctttcaaa aagtacttat gaagaagtta  
300  
aaaccatttt gagtaagaag ataaactgga ttgtgcagta tgcacaaaat aaggatctgg  
360  
attcagattc tgaatgttct aaaaagcccc agcatcatct gtttaatttc aggcataagc  
420  
cagaagaaaa attactccca cagtttgagt cccaagtacc aaaatattct gcaaaatgga  
480  
tagatggaag tgcaggtggc atctctaact gtacacaaaag aattttggag cagagggaaa  
540  
atacagactt tggactttct atgttacaag attcaggtgc cactttatgt cgtaacagtg  
600  
tattgtggcc tcatagtcac aaccaggcac agaaaaaga agagacaatc tctagtccag  
660  
aggctaagt ccagaccag catccacatt acagcagaga ggaataagtt tttgaagagt  
720  
taactacca agtgcaagaa aaagattctt tggcctcaca gctccatgtc cgccacgttg  
780  
ccatcgaaca gcttctgaag aactgttcta agttaccatg tctgcaagta gggcgaacag  
840  
gaatgaagtc gcacctacc ataaacaact gacctaaaca gacttacttc gtatgccttg  
900  
ccctttattg gtctcccaga catgcaaact ttgaagaagt ttgaagaaag ttgtggtccg  
960  
ttttttatg gtcattaaat ttgccaaca taaggcagta tttaacatct ttgtcaaata  
1020  
aagcagatca ttatactct  
1039

<210> 6122  
<211> 221  
<212> PRT  
<213> Homo sapiens

<400> 6122  
Met Asn Glu Glu Glu Gln Phe Val Asn Ile Asp Leu Asn Asp Asp Asn

```

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Ile Cys Ser Val Cys Lys Leu Gly Thr Asp Lys Glu Thr Leu Ser Phe
20           25           30
Cys His Ile Cys Phe Glu Leu Asn Ile Glu Gly Val Pro Lys Ser Asp
35           40           45
Leu Leu His Thr Lys Ser Leu Arg Gly His Lys Asp Cys Phe Glu Lys
50           55           60
Tyr His Leu Ile Ala Asn Gln Gly Cys Pro Arg Ser Lys Leu Ser Lys
65           70           75           80
Ser Thr Tyr Glu Glu Val Lys Thr Ile Leu Ser Lys Lys Ile Asn Trp
85           90           95
Ile Val Gln Tyr Ala Gln Asn Lys Asp Leu Asp Ser Asp Ser Glu Cys
100          105          110
Ser Lys Lys Pro Gln His His Leu Phe Asn Phe Arg His Lys Pro Glu
115          120          125
Glu Lys Leu Leu Pro Gln Phe Glu Ser Gln Val Pro Lys Tyr Ser Ala
130          135          140
Lys Trp Ile Asp Gly Ser Ala Gly Gly Ile Ser Asn Cys Thr Gln Arg
145          150          155          160
Ile Leu Glu Gln Arg Glu Asn Thr Asp Phe Gly Leu Ser Met Leu Gln
165          170          175
Asp Ser Gly Ala Thr Leu Cys Arg Asn Ser Val Leu Trp Pro His Ser
180          185          190
His Asn Gln Ala Gln Lys Lys Glu Glu Thr Ile Ser Ser Pro Glu Ala
195          200          205
Asn Val Gln Thr Gln His Pro His Tyr Ser Arg Glu Glu
210          215          220

```

&lt;210&gt; 6123

&lt;211&gt; 900

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6123

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120
gcgaaacaac aagagaaaaa aaaggaagct gccctctgcc caaaaccac gtcgaggtcc
180
ccaaacctgg gacccttagg tcttttctca cttagcgtgc ccaaccttct cctggcagga
240
aacaagcctc caggtctgct tccccgcaa ggactataca tggcaaatga cttaaagctc
300
ctgagacacc atctccagat tcccatccac ttccccaagg atttcttgct tgtgatgctt
360
gaaaaaggaa gtttgtctgc catgcgtttc ctcaccgccg tgaacttgga gcatccagag
420
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480
ctctgggaat cctctgggag gaccttggat gactttctga ccttccccag gcacgttttc
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600

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ccgcaccgcc ttctgtctgt cttctcttct tcccagaatg aagacatcac cgagccgcag  
 660  
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 720  
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 780  
 agatacggag cctttgggct gcccatcacc gtggcccatg tggatggcca aaccacatg  
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<210> 6124

<211> 300

<212> PRT

<213> Homo sapiens

<400> 6124

Xaa	His	Ala	Cys	Ile	Pro	Gln	Leu	Leu	Gly	Arg	Leu	Arg	Arg	Glu	Asn
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Arg	Leu	Asn	Pro	Gly	Gly	Gly	Gly	Cys	Gly	Glu	Leu	Arg	Ser	His	His
		20						25					30		
Cys	Thr	Pro	Ala	Trp	Ala	Thr	Arg	Ala	Lys	Gln	Gln	Glu	Lys	Lys	Lys
		35					40					45			
Glu	Ala	Ala	Leu	Cys	Pro	Lys	Pro	Thr	Ser	Arg	Ser	Pro	Asn	Leu	Gly
	50					55				60					
Pro	Leu	Gly	Leu	Phe	Ser	Leu	Ser	Val	Pro	Asn	Leu	Leu	Leu	Ala	Gly
65				70					75					80	
Asn	Lys	Pro	Pro	Gly	Leu	Leu	Pro	Arg	Lys	Gly	Leu	Tyr	Met	Ala	Asn
			85					90					95		
Asp	Leu	Lys	Leu	Leu	Arg	His	His	Leu	Gln	Ile	Pro	Ile	His	Phe	Pro
	100						105					110			
Lys	Asp	Phe	Leu	Ser	Val	Met	Leu	Glu	Lys	Gly	Ser	Leu	Ser	Ala	Met
	115					120					125				
Arg	Phe	Leu	Thr	Ala	Val	Asn	Leu	Glu	His	Pro	Glu	Met	Leu	Glu	Lys
	130				135					140					
Ala	Ser	Arg	Glu	Leu	Trp	Met	Arg	Val	Trp	Ser	Arg	Val	Ser	Val	Gly
145				150					155					160	
Leu	Trp	Glu	Ser	Ser	Gly	Arg	Thr	Leu	Asp	Asp	Phe	Leu	Thr	Phe	Pro
		165				170						175			
Arg	His	Val	Phe	Arg	Val	Met	Ile	Leu	Pro	Pro	Pro	Gly	Gly	Ser	Thr
	180					185						190			
Val	Leu	Pro	Val	Thr	Pro	Leu	Ser	Pro	His	Arg	Leu	Pro	Ala	Val	Phe
	195					200					205				
Ser	Ser	Ser	Gln	Asn	Glu	Asp	Ile	Thr	Glu	Pro	Gln	Ser	Ile	Leu	Ala
	210				215					220					
Ala	Ala	Glu	Lys	Ala	Gly	Met	Ser	Ala	Glu	Gln	Ala	Gln	Gly	Leu	Leu
225				230					235					240	
Glu	Lys	Ile	Ala	Thr	Pro	Lys	Val	Lys	Asn	Gln	Leu	Lys	Glu	Thr	Thr
		245					250						255		
Glu	Ala	Ala	Cys	Arg	Tyr	Gly	Ala	Phe	Gly	Leu	Pro	Ile	Thr	Val	Ala
	260					265						270			
His	Val	Asp	Gly	Gln	Thr	His	Met	Leu	Phe	Gly	Ser	Asp	Arg	Met	Glu
	275					280					285				
Leu	Leu	Ala	His	Leu	Leu	Gly	Glu	Lys	Trp	Met	Gly				

290 295 300

<210> 6125  
 <211> 468  
 <212> DNA  
 <213> Homo sapiens

<400> 6125  
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 120  
 ggagaattga aggggctgca ggagcaaata gcagaaacca aagcccggct tatcacgcag  
 180  
 cagcatgatc gggcccaaga gcagagtga catgccttga tgctgctga gctccagaag  
 240  
 ctgctgcagg aggagaggac ccagcgccag gacttggagc ttaggttaga agagaccga  
 300  
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 360  
 aagcagctga cccgtgaggt ggaggagctg aaaagtgaac tgcaggccat tcgagatgag  
 420  
 aagaatcagc cagacccccg gctgcaagaa cttcaggaag aggccgcc  
 468

<210> 6126  
 <211> 156  
 <212> PRT  
 <213> Homo sapiens

<400> 6126  
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 Asp Lys Lys Lys Met Lys Gln Asp Leu Glu Asp Ala Ser Asn Lys Ala  
 20 25 30  
 Glu Glu Glu Arg Ala Arg Leu Glu Gly Glu Leu Lys Gly Leu Gln Glu  
 35 40 45  
 Gln Ile Ala Glu Thr Lys Ala Arg Leu Ile Thr Gln Gln His Asp Arg  
 50 55 60  
 Ala Gln Glu Gln Ser Asp His Ala Leu Met Leu Arg Glu Leu Gln Lys  
 65 70 75 80  
 Leu Leu Gln Glu Glu Arg Thr Gln Arg Gln Asp Leu Glu Leu Arg Leu  
 85 90 95  
 Glu Glu Thr Arg Glu Ala Leu Ala Gly Arg Ala Tyr Ala Ala Glu Gln  
 100 105 110  
 Met Glu Gly Phe Glu Leu Gln Thr Lys Gln Leu Thr Arg Glu Val Glu  
 115 120 125  
 Glu Leu Lys Ser Glu Leu Gln Ala Ile Arg Asp Glu Lys Asn Gln Pro  
 130 135 140  
 Asp Pro Arg Leu Gln Glu Leu Gln Glu Glu Ala Ala  
 145 150 155

<210> 6127  
 <211> 1900

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6127

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120  
cgggcaagag actccaatat ggtgagggcg gcagcagagc tggccctgag ctgcctgcct  
180  
cacgcccacg cattgaacct taatgagatc cagcgggccc tggcgcagtg caaggaacag  
240  
gacaacctga tggtggagaa ggcctgcacg gcagtggaag aggcagctaa gggcgggggc  
300  
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360  
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420  
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1140  
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1260  
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1380  
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1500

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<210> 6128

<211> 530

<212> PRT

<213> Homo sapiens

<400> 6128

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Thr	Ile	Leu	Val	Glu	Cys	Trp	Asp	Gly	His	Leu	Thr	Pro	Pro	Glu	Val
		20					25					30			
Ala	Ser	Leu	Ala	Asp	Arg	Ala	Ser	Arg	Ala	Arg	Asp	Ser	Asn	Met	Val
		35				40					45				
Arg	Ala	Ala	Ala	Glu	Leu	Ala	Leu	Ser	Cys	Leu	Pro	His	Ala	His	Ala
		50				55				60					
Leu	Asn	Pro	Asn	Glu	Ile	Gln	Arg	Ala	Leu	Val	Gln	Cys	Lys	Glu	Gln
65				70					75					80	
Asp	Asn	Leu	Met	Leu	Glu	Lys	Ala	Cys	Met	Ala	Val	Glu	Glu	Ala	Ala
			85					90						95	
Lys	Gly	Gly	Gly	Val	Tyr	Pro	Glu	Val	Leu	Phe	Glu	Val	Ala	His	Gln
			100					105					110		
Trp	Phe	Trp	Leu	Tyr	Glu	Gln	Thr	Ala	Gly	Gly	Ser	Ser	Thr	Ala	Arg
		115				120						125			
Glu	Gly	Ala	Thr	Ser	Cys	Ser	Ala	Ser	Gly	Ile	Arg	Ala	Gly	Gly	Glu
		130				135					140				
Ala	Gly	Arg	Gly	Met	Pro	Glu	Gly	Arg	Gly	Gly	Pro	Gly	Thr	Glu	Pro
145				150						155				160	
Val	Thr	Val	Ala	Ala	Ala	Ala	Val	Thr	Ala	Ala	Ala	Thr	Val	Val	Pro
			165					170					175		
Val	Ile	Ser	Val	Gly	Ser	Ser	Leu	Tyr	Pro	Gly	Pro	Gly	Leu	Gly	His
			180					185					190		
Gly	His	Ser	Pro	Gly	Leu	His	Pro	Tyr	Thr	Ala	Leu	Gln	Pro	His	Leu
		195				200						205			
Pro	Cys	Ser	Pro	Gln	Tyr	Leu	Thr	His	Pro	Ala	His	Pro	Ala	His	Pro
		210				215					220				
Met	Pro	His	Met	Pro	Arg	Pro	Ala	Val	Phe	Pro	Val	Pro	Ser	Ser	Ala
225				230						235				240	
Tyr	Pro	Gln	Gly	Val	His	Pro	Ala	Phe	Leu	Gly	Ala	Gln	Tyr	Pro	Tyr
			245					250				255			
Ser	Val	Thr	Pro	Pro	Ser	Leu	Ala	Ala	Thr	Ala	Val	Ser	Phe	Pro	Val

260 265 270  
 Pro Ser Met Ala Pro Ile Thr Val His Pro Tyr His Thr Glu Pro Gly  
 275 280 285  
 Leu Pro Leu Pro Thr Ser Val Ala Cys Glu Leu Trp Gly Gln Gly Thr  
 290 295 300  
 Val Ser Ser Val His Pro Ala Ser Thr Phe Pro Ala Ile Gln Gly Ala  
 305 310 315 320  
 Ser Leu Pro Ala Leu Thr Thr Gln Pro Ser Pro Leu Val Ser Gly Gly  
 325 330 335  
 Phe Pro Pro Pro Glu Glu Glu Thr His Ser Gln Pro Val Asn Pro His  
 340 345 350  
 Ser Leu His His Leu His Ala Ala Tyr Arg Val Gly Met Leu Ala Leu  
 355 360 365  
 Glu Met Leu Gly Arg Arg Ala His Asn Asp His Pro Asn Asn Phe Ser  
 370 375 380  
 Arg Ser Pro Pro Tyr Thr Asp Asp Val Lys Trp Leu Leu Gly Leu Ala  
 385 390 395 400  
 Ala Lys Leu Gly Val Asn Tyr Val His Gln Phe Cys Val Gly Ala Ala  
 405 410 415  
 Lys Gly Val Leu Ser Pro Phe Val Leu Gln Glu Ile Val Met Glu Thr  
 420 425 430  
 Leu Gln Arg Leu Ser Pro Ala His Ala His Asn His Leu Arg Ala Pro  
 435 440 445  
 Ala Phe His Gln Leu Val Gln Arg Cys Gln Gln Ala Tyr Met Gln Tyr  
 450 455 460  
 Ile His His Arg Leu Ile His Leu Thr Pro Ala Asp Tyr Asp Asp Phe  
 465 470 475 480  
 Val Asn Ala Ile Arg Ser Ala Arg Ser Ala Phe Cys Leu Thr Pro Met  
 485 490 495  
 Gly Met Met Gln Phe Asn Asp Ile Leu Gln Asn Leu Lys Arg Ser Lys  
 500 505 510  
 Gln Thr Lys Glu Leu Trp Gln Arg Val Ser Leu Glu Met Ala Thr Phe  
 515 520 525  
 Ser Pro  
 530

&lt;210&gt; 6129

&lt;211&gt; 2012

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6129

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<211> 364

<212> PRT

<213> Homo sapiens

<400> 6130

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&lt;210&gt; 6131

&lt;211&gt; 3526

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6131

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&lt;210&gt; 6132

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6132

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&lt;210&gt; 6133

&lt;211&gt; 4156

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6133

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&lt;210&gt; 6134

&lt;211&gt; 595

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6134

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		100					105						110		
Ala	Ser	Lys	Ser	Gly	Asn	Trp	Glu	Ser	Ser	Glu	Gly	Trp	Gly	Ala	Gln



115	120	125
Pro Glu Gly Ala Gly Ala Gln Arg Asn Thr Asn Thr Pro Asn Asn Trp		
130	135	140
Asp Thr Ala Phe Gly His Pro Gln Ala Tyr Gln Gly Pro Ala Thr Gly		
145	150	155
Asp Asp Asp Asp Trp Asp Glu Asp Trp Asp Gly Pro Lys Ser Ser Ser		
165	170	175
Tyr Phe Lys Asp Ser Glu Ser Ala Asp Ala Gly Gly Ala Gln Arg Gly		
180	185	190
Asn Ser Arg Ala Ser Ser Ser Ser Met Lys Ile Pro Leu Asn Lys Phe		
195	200	205
Pro Gly Phe Ala Lys Pro Gly Thr Glu Gln Tyr Leu Leu Ala Lys Gln		
210	215	220
Leu Ala Lys Pro Lys Glu Lys Ile Pro Ile Ile Val Gly Asp Tyr Gly		
225	230	235
Pro Met Trp Val Tyr Pro Thr Ser Thr Phe Asp Cys Val Val Ala Asp		
245	250	255
Pro Arg Lys Gly Ser Lys Met Tyr Gly Leu Lys Ser Tyr Ile Glu Tyr		
260	265	270
Gln Leu Thr Pro Thr Asn Thr Asn Arg Ser Val Asn His Arg Tyr Lys		
275	280	285
His Phe Asp Trp Leu Tyr Glu Arg Leu Leu Val Lys Phe Gly Ser Ala		
290	295	300
Ile Pro Ile Pro Ser Leu Pro Asp Lys Gln Val Thr Gly Arg Phe Glu		
305	310	315
Glu Glu Phe Ile Lys Met Arg Met Glu Arg Leu Gln Ala Trp Met Thr		
325	330	335
Arg Met Cys Arg His Pro Val Ile Ser Glu Ser Glu Val Phe Gln Gln		
340	345	350
Phe Leu Asn Phe Arg Asp Glu Lys Glu Trp Lys Thr Gly Lys Arg Lys		
355	360	365
Ala Glu Arg Asp Glu Leu Ala Gly Val Met Ile Phe Ser Thr Met Glu		
370	375	380
Pro Glu Ala Pro Asp Leu Asp Leu Val Glu Ile Glu Gln Lys Cys Glu		
385	390	395
Ala Val Gly Lys Phe Thr Lys Ala Met Asp Asp Gly Val Lys Glu Leu		
405	410	415
Leu Thr Val Gly Gln Glu His Trp Lys Arg Cys Thr Gly Pro Leu Pro		
420	425	430
Lys Glu Tyr Gln Lys Ile Gly Lys Ala Leu Gln Ser Leu Ala Thr Val		
435	440	445
Phe Ser Ser Ser Gly Tyr Gln Gly Glu Thr Asp Leu Asn Asp Ala Ile		
450	455	460
Thr Glu Ala Gly Lys Thr Tyr Glu Glu Ile Ala Ser Leu Val Ala Glu		
465	470	475
Gln Pro Lys Lys Asp Leu His Phe Leu Met Glu Cys Asn His Glu Tyr		
485	490	495
Lys Gly Phe Leu Gly Cys Phe Pro Asp Ile Ile Gly Thr His Lys Gly		
500	505	510
Ala Ile Glu Lys Val Lys Glu Ser Asp Lys Leu Val Ala Thr Ser Lys		
515	520	525
Ile Thr Leu Gln Asp Lys Gln Asn Met Val Lys Arg Val Ser Ile Met		
530	535	540
Ser Tyr Ala Leu Gln Ala Glu Met Asn His Phe His Ser Asn Arg Ile		

545                      550                      555                      560  
 Tyr Asp Tyr Asn Ser Val Ile Arg Leu Tyr Leu Glu Gln Gln Val Gln  
                                  565                      570                      575  
 Phe Tyr Glu Thr Ile Ala Glu Lys Leu Arg Gln Ala Leu Ser Arg Phe  
                                  580                      585                      590  
 Pro Val Met  
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<210> 6135  
 <211> 526  
 <212> DNA  
 <213> Homo sapiens

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 120  
 aggccaaacc agggatatcag ccatctggag aatctgacaa agaaaacaaa gtacaggaac  
 180  
 gtcccccaag tgcgtcttcc agtagtgaca tgtctctctc agaacctcca cagcctcttg  
 240  
 caagaaaaga cttgatggaa tctacatgga tgcagcctga aagattgagc ccacaagttc  
 300  
 accattctca accacagcct tttgctggaa cagctggaag tttactctcc catctcttga  
 360  
 gtttagagca tgtaggaatt ttgcataagg attttgaatc tattttacca accaggaaga  
 420  
 atcataatat ggcttcaagg ccattaactt ttacacctca accatatgtg acctcaccag  
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<210> 6136  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 6136  
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 Glu Ser Thr Trp Met Gln Pro Glu Arg Leu Ser Pro Gln Val His His  
                                  20                      25                      30  
 Ser Gln Pro Gln Pro Phe Ala Gly Thr Ala Gly Ser Leu Leu Ser His  
                                  35                      40                      45  
 Leu Leu Ser Leu Glu His Val Gly Ile Leu His Lys Asp Phe Glu Ser  
                                  50                      55                      60  
 Ile Leu Pro Thr Arg Lys Asn His Asn Met Ala Ser Arg Pro Leu Thr  
 65                      70                      75                      80  
 Phe Thr Pro Gln Pro Tyr Val Thr Ser Pro Ala Ala Tyr Thr Asp Ala  
                                  85                      90                      95  
 Leu Val Lys Pro Ser Ala Ser Gln Tyr  
                                  100                      105

&lt;210&gt; 6137

&lt;211&gt; 2073

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6137

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240  
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1440

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 2073

<210> 6138

<211> 550

<212> PRT

<213> Homo sapiens

<400> 6138

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			20					25					30		
Arg	Lys	Glu	Ala	Lys	Lys	Gln	Gly	His	Lys	Lys	Pro	Arg	Lys	Asp	Pro
		35				40					45				
Gly	Val	Pro	Asn	Ser	Ala	Pro	Phe	Lys	Glu	Ala	Leu	Leu	Arg	Glu	Ala
	50				55					60					
Glu	Leu	Arg	Lys	Gln	Arg	Leu	Glu	Glu	Leu	Lys	Gln	Gln	Gln	Lys	Leu
65				70					75					80	
Asp	Arg	Gln	Lys	Glu	Leu	Glu	Lys	Lys	Arg	Lys	Leu	Glu	Thr	Asn	Pro
			85					90					95		
Asp	Ile	Lys	Xaa	Ile	Lys	Cys	Gly	Thr	Xaa	Met	Glu	Lys	Glu	Phe	Gly
		100					105						110		
Leu	Cys	Lys	Thr	Glu	Asn	Lys	Ala	Lys	Ser	Gly	Lys	Gln	Asn	Ser	Lys
		115				120					125				
Lys	Leu	Tyr	Cys	Gln	Glu	Leu	Lys	Lys	Val	Ile	Glu	Ala	Ser	Asp	Val
	130				135					140					
Val	Leu	Glu	Val	Leu	Asp	Ala	Arg	Asp	Pro	Leu	Gly	Cys	Arg	Cys	Pro
145				150					155					160	
Gln	Val	Glu	Glu	Ala	Ile	Val	Gln	Ser	Gly	Gln	Lys	Lys	Leu	Val	Leu
		165					170						175		
Ile	Leu	Asn	Lys	Ser	Asp	Leu	Val	Pro	Lys	Glu	Asn	Leu	Glu	Ser	Trp
		180					185					190			
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Lys Asn Ala Ala Pro Phe Arg Ser Glu Val Cys Phe Gly Lys Glu Gly
  225              230              235              240
Leu Trp Lys Leu Leu Gly Gly Phe Gln Glu Thr Cys Ser Lys Ala Ile
      245              250              255
Arg Val Gly Val Ile Gly Phe Pro Asn Val Gly Lys Ser Ser Ile Ile
      260              265              270
Asn Ser Leu Lys Gln Glu Gln Met Cys Asn Val Gly Val Ser Met Gly
  275              280              285
Leu Thr Arg Ser Met Gln Val Val Pro Leu Asp Lys Gln Ile Thr Ile
  290              295              300
Ile Asp Ser Pro Ser Phe Ile Val Ser Pro Leu Asn Ser Ser Ser Ala
  305              310              315              320
Leu Ala Leu Arg Ser Pro Ala Ser Ile Glu Val Val Lys Pro Met Glu
      325              330              335
Ala Ala Ser Ala Ile Leu Ser Gln Ala Asp Ala Arg Gln Val Val Leu
      340              345              350
Lys Tyr Thr Val Pro Gly Tyr Arg Asn Ser Leu Glu Phe Phe Thr Val
      355              360              365
Leu Ala Gln Arg Arg Gly Met His Gln Lys Gly Gly Ile Pro Asn Val
  370              375              380
Glu Gly Ala Ala Lys Leu Leu Trp Ser Glu Trp Thr Gly Ala Ser Leu
  385              390              395              400
Ala Tyr Tyr Cys His Pro Pro Thr Ser Trp Thr Pro Pro Pro Tyr Phe
      405              410              415
Asn Glu Ser Ile Val Val Asp Met Lys Ser Gly Phe Asn Leu Glu Glu
      420              425              430
Leu Glu Lys Asn Asn Ala Gln Ser Ile Arg Ala Ile Lys Gly Pro His
      435              440              445
Leu Ala Asn Ser Ile Leu Phe Gln Ser Ser Gly Leu Thr Asn Gly Ile
      450              455              460
Ile Glu Glu Lys Asp Ile His Glu Glu Leu Pro Lys Arg Lys Glu Arg
  465              470              475              480
Lys Gln Glu Glu Arg Glu Asp Asp Lys Asp Ser Asp Gln Glu Thr Val
      485              490              495
Asp Glu Glu Val Asp Glu Asn Ser Ser Gly Met Phe Ala Ala Glu Glu
      500              505              510
Thr Gly Glu Ala Leu Ser Glu Glu Thr Thr Ala Gly Glu Gln Ser Thr
      515              520              525
Arg Ser Phe Ile Leu Asp Lys Ile Ile Glu Glu Asp Asp Ala Tyr Asp
  530              535              540
Phe Ser Thr Asp Tyr Val
  545              550

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&lt;210&gt; 6139

&lt;211&gt; 2249

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6139

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120  
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180  
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240  
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<210> 6140

<211> 381

<212> PRT

<213> Homo sapiens

<400> 6140

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			20					25					30		
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			35				40					45			
Arg	Leu	Phe	Glu	Asn	Gln	Leu	Val	Gly	Pro	Glu	Ser	Ile	Ala	His	Ile
	50					55					60				
Gly	Asp	Val	Met	Phe	Thr	Gly	Thr	Ala	Asp	Gly	Arg	Val	Val	Lys	Leu
65					70					75					80
Glu	Asn	Gly	Glu	Ile	Glu	Thr	Ile	Ala	Arg	Phe	Xaa	Phe	Gly	Pro	Xaa
				85					90					95	
Cys	Lys	Thr	Arg	Asp	Asp	Glu	Pro	Val	Cys	Gly	Arg	Pro	Leu	Gly	Ile
			100					105					110		
Arg	Ala	Gly	Pro	Asn	Gly	Thr	Leu	Phe	Val	Ala	Asp	Ala	Tyr	Lys	Gly
		115				120					125				
Leu	Phe	Glu	Val	Asn	Pro	Trp	Lys	Arg	Glu	Val	Lys	Leu	Leu	Leu	Ser
	130					135					140				
Ser	Glu	Thr	Pro	Ile	Glu	Gly	Lys	Asn	Met	Ser	Phe	Val	Asn	Asp	Leu
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Thr	Val	Thr	Gln	Asp	Gly	Arg	Lys	Ile	Tyr	Phe	Thr	Asp	Ser	Ser	Ser
			165					170					175		
Lys	Trp	Gln	Arg	Arg	Asp	Tyr	Leu	Leu	Leu	Val	Met	Glu	Gly	Thr	Asp
			180					185					190		
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Asn Met Pro Gly Phe Pro Asp Asn Ile Arg Pro Ser Ser Ser Gly Gly
      260              265              270
Tyr Trp Val Gly Met Ser Thr Ile Arg Pro Asn Pro Gly Phe Ser Met
      275              280              285
Leu Asp Phe Leu Ser Glu Arg Pro Trp Ile Lys Arg Met Ile Phe Lys
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305              310              315              320
Lys Phe Val Pro Arg Tyr Ser Leu Val Leu Glu Leu Ser Asp Ser Gly
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Ala Phe Arg Arg Ser Leu His Asp Pro Asp Gly Leu Val Ala Thr Tyr
      340              345              350
Ile Ser Glu Val His Glu His Asp Gly His Leu Tyr Leu Gly Ser Phe
      355              360              365
Arg Ser Pro Phe Leu Cys Arg Leu Ser Leu Gln Ala Val
      370              375              380

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&lt;210&gt; 6141

&lt;211&gt; 5651

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6141

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<211> 513

<212> PRT

<213> Homo sapiens

<400> 6142

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Gly Phe Leu Tyr Arg Arg Leu Lys Thr Gln Glu Lys Arg Glu Met Gln
 65          70          75          80
Lys Glu Ile Leu Ser Val Leu Gly Leu Pro His Arg Pro Arg Pro Leu
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His Gly Leu Gln Gln Pro Gln Pro Pro Ala Leu Arg Gln Gln Glu Glu
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Gln Gln Gln Gln Gln Gln Leu Pro Arg Gly Glu Pro Pro Pro Gly Arg
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Leu Lys Ser Ala Pro Leu Phe Met Leu Asp Leu Tyr Asn Ala Leu Ser
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Ala Asp Asn Asp Glu Asp Gly Ala Ser Glu Gly Glu Arg Gln Gln Ser
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Trp Pro His Glu Ala Ala Ser Ser Ser Gln Arg Arg Gln Pro Pro Pro
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Gly Ser Gly Gly Ala Ser Pro Leu Thr Ser Ala Gln Asp Ser Ala Phe
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<212> PRT

<213> Homo sapiens

<400> 6144

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			20				25					30		Asn
Ser	Gly	Ser	Arg	Gln	Ala	Trp	Val	His	Pro	Pro	Ala	Gln	Pro	Arg
			35				40					45		Thr
Ala	Gly	Pro	Glu	Leu	Gly	Gly	Gln	Gly	Ile	Pro	Ser	Pro	Gly	Cys
			50				55				60			Ala
Cys	Gln	Arg	Gly	Glu	Ala	Gly	Gly	Gly	Gly	Asn	Ala	Val	Leu	Pro
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Glu	Ser	Val	Leu	Arg	Ala	Ser	Ala	Val	Gly	Arg	Gly	Ala	Glu	Gly
					85				90				95	Pro
Gly	Ala	Leu	Thr	Arg	Ser	Gly	Ser	Gly	Ala	Ala	Ser	Ala	Leu	Val
					100				105				110	Arg
Pro	Gly	Glu	Lys	Gly	Cys	Trp	Cys	Arg	Thr	Ala	Ser	Gly	Ala	Gly
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Ser	Gly	Asp	Arg	Gly	Pro	Glu	Val	Gln	Val	Pro	Gly	Gly		
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<210> 6145

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&lt;210&gt; 6146

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6146

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			20					25					30		
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Gln	Pro	Pro	Pro	Val	Lys	Cys	Gln	Glu	Thr	Cys	Ala	Pro	Lys	Thr	Lys
	50				55						60				
Asp	Pro	Cys	Ala	Pro	Gln	Val	Lys	Lys	Gln	Cys	Pro	Pro	Lys	Asp	Thr
65				70					75					80	
Ile	Ile	Pro	Ala	Gln	Gln	Lys	Cys	Pro	Ser	Ala	Gln	Gln	Ala	Ser	Lys
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Ser	Lys	Gln	Lys												
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&lt;210&gt; 6147

&lt;211&gt; 1852

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6147

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1852

&lt;210&gt; 6148



&lt;211&gt; 410

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6148

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Gly Trp Ile Lys Lys Gly Thr Asp Val Asp Val Gly Pro Phe Leu Asn
      35           40           45
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 50           55           60
Phe Asn Leu Asp Ile Arg Arg Ala Ile Gln Ile Leu Asn Glu Gly Ala
65           70           75           80
Ser Ser Glu Lys Gly Asp Leu Asn Leu Asn Val Val Ala Met Ala Leu
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Ser Gly Tyr Thr Asp Glu Lys Asn Ser Leu Trp Arg Glu Met Cys Ser
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Thr Leu Arg Leu Gln Leu Asn Asn Pro Tyr Leu Cys Val Met Phe Ala
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130          135          140
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145          150          155          160
Asp Thr Gln Leu Asn Arg Tyr Ile Glu Lys Leu Thr Asn Glu Met Lys
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      180          185          190
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      195          200          205
Thr Ala Ser Tyr Cys Met Leu Gln Gly Ser Pro Leu Asp Val Leu Lys
210          215          220
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225          230          235          240
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275          280          285
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290          295          300
Ser Lys Val Thr Ser Cys Pro Gly Cys Arg Lys Pro Leu Pro Arg Cys
305          310          315          320
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      340          345          350
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Gly His Ala Gly His Met Leu Ser Trp Phe Arg Asp His Ala Glu Cys
370          375          380
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<210> 6150

<211> 508

<212> PRT

<213> Homo sapiens

<400> 6150

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			20					25					30		
Lys	Val	Ser	Leu	Thr	Lys	Thr	Pro	Lys	Leu	Glu	Arg	Gly	Asp	Gly	Gly
			35					40					45		
Lys	Glu	Val	Arg	Glu	Arg	Ala	Ser	Lys	Arg	Lys	Leu	Pro	Phe	Thr	Ala
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Gly	Ala	Asn	Gly	Glu	Gln	Lys	Asp	Ser	Asp	Thr	Glu	Lys	Gln	Gly	Pro
65							70				75				80
Glu	Arg	Lys	Arg	Ile	Lys	Lys	Glu	Pro	Val	Thr	Arg	Lys	Ala	Gly	Leu
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Leu	Phe	Gly	Met	Gly	Leu	Ser	Gly	Ile	Arg	Ala	Gly	Tyr	Pro	Leu	Ser
			100					105					110		
Glu	Arg	Gln	Gln	Val	Ala	Leu	Leu	Met	Gln	Met	Thr	Ala	Glu	Glu	Ser
			115					120					125		
Ala	Asn	Ser	Pro	Val	Asp	Thr	Thr	Pro	Lys	His	Pro	Ser	Gln	Ser	Thr
			130					135					140		
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Ile	Arg	Gly	Asp	Ala	Arg	Arg	Ile	Lys	Glu	Leu	Ile	Ser	Glu	Gly	Ala
				180						185					190
Asp	Val	Asn	Val	Lys	Asp	Phe	Ala	Gly	Trp	Thr	Ala	Leu	His	Glu	Ala

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210	215	220
Ala Glu Val Asn Thr Lys Gly Leu Asp Asp Asp Thr Pro Leu His Asp		
225	230	235
Ala Ala Asn Asn Gly His Tyr Lys Val Val Lys Leu Leu Leu Arg Tyr		
	245	250
Gly Gly Asn Pro Gln Gln Ser Asn Arg Lys Gly Glu Thr Pro Leu Lys		
	260	265
Val Ala Asn Ser Pro Thr Met Val Asn Leu Leu Leu Gly Lys Gly Thr		
	275	280
Tyr Thr Ser Ser Glu Glu Ser Ser Thr Glu Ser Ser Glu Glu Asp		
	290	295
Ala Pro Ser Phe Ala Pro Ser Ser Ser Val Asp Gly Asn Asn Thr Asp		
305	310	315
Ser Glu Phe Glu Lys Gly Leu Lys His Lys Ala Lys Asn Pro Glu Pro		
	325	330
Gln Lys Ala Thr Ala Pro Val Lys Asp Glu Tyr Glu Phe Asp Glu Asp		
	340	345
Asp Glu Gln Asp Arg Val Pro Pro Val Asp Asp Lys His Leu Leu Lys		
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Lys Asp Tyr Arg Lys Glu Thr Lys Ser Asn Ser Phe Ile Ser Ile Pro		
	370	375
Lys Met Glu Val Lys Ser Tyr Thr Lys Asn Asn Thr Ile Ala Pro Lys		
385	390	395
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	405	410
Ser Val Thr Val Gly Thr Gly Glu Lys Leu Arg Leu Ser Ala His Thr		
	420	425
Ile Leu Pro Gly Ser Lys Thr Arg Glu Pro Ser Asn Ala Lys Gln Gln		
	435	440
Lys Glu Lys Asn Lys Val Lys Lys Lys Arg Lys Lys Glu Thr Lys Gly		
	450	455
Arg Glu Val Arg Phe Gly Lys Arg Ser Xaa Ser Ser Ala Pro Arg Ser		
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	485	490
Gly Ala Leu Ala Ala Ser Arg Gly Pro Arg Trp Cys		
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&lt;210&gt; 6151

&lt;211&gt; 648

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6151

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240

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<210> 6152

<211> 130

<212> PRT

<213> Homo sapiens

<400> 6152

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			20					25					30		
Glu	Arg	Val	Ala	Phe	Ser	Leu	Phe	Thr	His	Thr	Cys	Thr	Gln	Pro	Leu
		35					40					45			
Ala	Gly	Thr	Val	Asp	Thr	His	Leu	Pro	Ser	Leu	Leu	Leu	Pro	Val	Ile
	50					55					60				
Leu	His	Pro	Leu	Gly	Ala	Ala	Ser	Ala	Gly	Arg	Ala	Leu	Glu	Pro	Lys
65				70					75				80		
Ala	Asp	Pro	His	Thr	Cys	Pro	Tyr	Gly	Arg	Lys	Glu	Ser	Arg	Gly	Glu
			85					90					95		
Lys	Val	Arg	Arg	Gly	Arg	Ala	Lys	Ser	Asn	Ser	Gly	Pro	Asn	Val	Pro
			100				105						110		
Gly	Pro	Pro	Ala	Ala	Pro	Gln	Ser	Leu	Lys	Ser	Gly	Ser	Pro	Ser	Thr
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<210> 6153

<211> 1810

<212> DNA

<213> Homo sapiens

<400> 6153

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&lt;210&gt; 6154

&lt;211&gt; 388

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6154

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 35           40           45
Asn Phe Ser Pro Ser Gly His Leu Leu Ala Ser Gly Ser Arg Asp Lys
 50           55           60
Thr Val Arg Ile Trp Val Pro Asn Val Lys Gly Glu Ser Thr Val Phe
 65           70           75           80
Arg Ala His Thr Ala Thr Val Arg Ser Val His Phe Cys Ser Asp Gly
 85           90           95
Gln Ser Phe Val Thr Ala Ser Asp Asp Lys Thr Val Lys Val Trp Ala
 100          105          110
Thr His Arg Gln Lys Phe Leu Phe Ser Leu Ser Gln His Ile Asn Trp
 115          120          125
Val Arg Cys Ala Lys Phe Ser Pro Asp Gly Arg Leu Ile Val Ser Ala
 130          135          140
Ser Asp Asp Lys Thr Val Lys Leu Trp Asp Lys Ser Ser Arg Glu Cys
 145          150          155          160
Val His Ser Tyr Cys Glu His Gly Gly Phe Val Thr Tyr Val Asp Phe
 165          170          175
His Pro Ser Gly Thr Cys Ile Ala Ala Ala Gly Met Asp Asn Thr Val
 180          185          190
Lys Val Trp Asp Val Arg Thr His Arg Leu Leu Gln His Tyr Gln Leu
 195          200          205
His Ser Ala Ala Val Asn Gly Leu Ser Phe His Pro Ser Gly Asn Tyr
 210          215          220
Leu Ile Thr Ala Ser Ser Asp Ser Thr Leu Lys Ile Leu Asp Leu Met
 225          230          235          240
Glu Gly Arg Leu Leu Tyr Thr Leu His Gly His Gln Gly Pro Ala Thr
 245          250          255
Thr Val Ala Phe Ser Arg Thr Gly Glu Tyr Phe Ala Ser Gly Gly Ser
 260          265          270
Asp Glu Gln Val Met Val Trp Lys Ser Asn Phe Asp Ile Val Asp His
 275          280          285
Gly Glu Val Thr Lys Val Pro Arg Pro Pro Ala Thr Leu Ala Ser Ser
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Met Gly Asn Leu Pro Glu Val Asp Phe Pro Val Pro Pro Gly Arg Gly
 305          310          315          320
Trp Ser Val Glu Ser Val Gln Ser Gln Pro Gln Glu Pro Val Ser Val
 325          330          335
Pro Gln Thr Leu Thr Ser Thr Leu Glu His Ile Val Gly Gln Leu Asp
 340          345          350
Val Leu Thr Gln Thr Val Ser Ile Leu Glu Gln Arg Leu Thr Leu Thr
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<210> 6155  
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<212> DNA  
<213> Homo sapiens

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<210> 6156  
<211> 164  
<212> PRT  
<213> Homo sapiens

<400> 6156  
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<210> 6157
<211> 2135
<212> DNA
<213> Homo sapiens
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&lt;210&gt; 6158

&lt;211&gt; 455

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6158

Met Ala Arg Lys Ala Leu Lys Leu Ala Ser Trp Thr Ser Met Ala Leu  
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5341

450

455

&lt;210&gt; 6159

&lt;211&gt; 4310

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6159

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&lt;210&gt; 6160

&lt;211&gt; 551

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6160

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His	Glu	Asp	Val	Cys	Val	Phe	Lys	Cys	Ser	Val	Ser	Arg	Glu	Thr	Glu

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Cys Ser Arg Val Gly Lys Gln Ser Phe Ile Ile Thr Leu Gly Cys Asn
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Ser Val Leu Ile Gln Phe Ala Thr Pro Asn Asp Phe Cys Ser Phe Tyr
      50      55      60
Asn Ile Leu Lys Thr Cys Arg Gly His Thr Leu Glu Arg Ser Val Phe
65      70      75      80
Ser Glu Arg Thr Glu Glu Ser Ser Ala Val Gln Tyr Phe Gln Phe Tyr
      85      90      95
Gly Tyr Leu Ser Gln Gln Gln Asn Met Met Gln Asp Tyr Val Arg Thr
      100      105      110
Gly Thr Tyr Gln Arg Ala Ile Leu Gln Asn His Thr Asp Phe Lys Asp
      115      120      125
Lys Ile Val Leu Asp Val Gly Cys Gly Ser Gly Ile Leu Ser Phe Phe
      130      135      140
Ala Ala Gln Ala Gly Ala Arg Lys Ile Tyr Ala Val Glu Ala Ser Thr
145      150      155      160
Met Ala Gln His Ala Glu Val Leu Val Lys Ser Asn Asn Leu Thr Asp
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Arg Ile Val Val Ile Pro Gly Lys Val Glu Glu Val Ser Leu Pro Glu
      180      185      190
Gln Val Asp Ile Ile Ile Ser Glu Pro Met Gly Tyr Met Leu Phe Asn
      195      200      205
Glu Arg Met Leu Glu Ser Tyr Leu His Ala Lys Lys Tyr Leu Lys Pro
      210      215      220
Ser Gly Asn Met Phe Pro Thr Ile Gly Asp Val His Leu Ala Pro Phe
225      230      235      240
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      245      250      255
Tyr Gln Pro Ser Phe His Gly Val Asp Leu Ser Ala Leu Arg Gly Ala
      260      265      270
Ala Val Asp Glu Tyr Phe Arg Gln Pro Val Val Asp Thr Phe Asp Ile
      275      280      285
Arg Ile Leu Met Ala Lys Ser Val Lys Tyr Thr Val Asn Phe Leu Glu
290      295      300
Ala Lys Glu Gly Asp Leu His Arg Ile Glu Ile Pro Phe Lys Phe His
305      310      315      320
Met Leu His Ser Gly Leu Val His Gly Leu Ala Phe Trp Phe Asp Val
      325      330      335
Ala Phe Ile Gly Ser Ile Met Thr Val Trp Leu Ser Thr Ala Pro Thr
      340      345      350
Glu Pro Leu Thr His Trp Tyr Gln Val Arg Cys Leu Phe Gln Ser Pro
      355      360      365
Leu Phe Ala Lys Ala Gly Asp Thr Leu Ser Gly Thr Cys Leu Leu Ile
      370      375      380
Ala Asn Lys Arg Gln Ser Tyr Asp Ile Ser Ile Val Ala Gln Val Asp
385      390      395      400
Gln Thr Gly Ser Lys Ser Ser Asn Leu Leu Asp Leu Lys Asn Pro Phe
      405      410      415
Phe Arg Tyr Thr Gly Thr Thr Pro Ser Pro Pro Pro Gly Ser His Tyr
      420      425      430
Thr Ser Pro Ser Glu Asn Met Trp Asn Thr Gly Ser Thr Tyr Asn Leu
      435      440      445
Ser Ser Gly Met Ala Val Ala Gly Met Pro Thr Ala Tyr Asp Leu Ser

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450                      455                      460  
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 Leu Ala Asn Thr Gly Ile Val Asn His Thr His Ser Arg Met Gly Ser  
                     485                      490                      495  
 Ile Met Ser Thr Gly Ile Val Gln Gly Ser Ser Gly Ala Gln Gly Ser  
                     500                      505                      510  
 Gly Gly Gly Ser Thr Ser Ala His Tyr Ala Val Asn Ser Gln Phe Thr  
                     515                      520                      525  
 Met Gly Gly Pro Ala Ile Ser Met Ala Ser Pro Met Ser Ile Pro Thr  
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<210> 6161

<211> 1489

<212> DNA

<213> Homo sapiens

<400> 6161

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 720  
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 1020



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 1489

<210> 6162

<211> 58

<212> PRT

<213> Homo sapiens

<400> 6162

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Glu	Arg	Lys	Glu	Asp	Gly	Gly	Asn	Gly	Lys	Lys	Arg	Ser	Thr	Leu	Leu
			20					25					30		
Arg	Lys	Gly	Thr	Glu	Pro	Gly	Val	Val	Ala	His	Ala	Cys	Asn	Pro	Xaa
		35					40						45		
Thr	Leu	Gly	Gly	Arg	Ser	Lys	Glu	Ile	Thr						
	50						55								

<210> 6163

<211> 713

<212> DNA

<213> Homo sapiens

<400> 6163

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 120  
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 180  
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<210> 6164

<211> 120

<212> PRT

<213> Homo sapiens

<400> 6164

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			20					25					30		
Pro	Leu	Pro	Gly	Lys	Ala	Gly	Leu	Ala	Leu	Leu	Lys	Pro	Gln	Ser	Arg
		35					40					45			
Ser	Asp	Gly	Tyr	Arg	Tyr	Leu	Gly	Lys	Asp	Thr	Val	Asp	Gly	Leu	Asp
	50					55					60				
Ser	Ser	Leu	Leu	Lys	Cys	Thr	Arg	Arg	Cys	Met	Arg	Gly	Phe	Arg	Leu
65					70				75					80	
Pro	Glu	Lys	Gln	Pro	Ser	Lys	Thr	Arg	Val	Ser	Phe	Leu	Glu	Ser	Lys
			85					90					95		
Arg	Lys	Glu	Gly	Ser	Gly	Trp	Leu	His	Trp	Ser	Val	Thr	Arg	Ser	Gly
			100				105						110		
Ala	Phe	Arg	Leu	Lys	Val	Thr	Val								
		115					120								

<210> 6165

<211> 1004

<212> DNA

<213> Homo sapiens

<400> 6165

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 1004

<210> 6166

<211> 239

<212> PRT

<213> Homo sapiens

<400> 6166

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			20					25					30		
Gly	Gly	Pro	Thr	Pro	Gln	Glu	Ala	Ile	Gln	Arg	Leu	Arg	Asp	Thr	Glu
		35				40						45			
Glu	Met	Leu	Ser	Lys	Lys	Gln	Glu	Phe	Leu	Glu	Lys	Lys	Ile	Glu	Gln
	50					55					60				
Glu	Leu	Thr	Ala	Ala	Lys	Lys	His	Gly	Thr	Lys	Asn	Lys	Arg	Ala	Ala
65					70					75				80	
Leu	Gln	Ala	Leu	Lys	Arg	Lys	Lys	Arg	Tyr	Glu	Lys	Gln	Leu	Ala	Gln
				85					90					95	
Ile	Asp	Gly	Thr	Leu	Ser	Thr	Ile	Glu	Phe	Gln	Arg	Glu	Ala	Leu	Glu
			100					105					110		
Asn	Ala	Asn	Thr	Asn	Thr	Glu	Val	Leu	Lys	Asn	Met	Gly	Tyr	Ala	Ala
		115					120						125		
Lys	Ala	Met	Lys	Ala	Ala	His	Asp	Asn	Met	Asp	Ile	Asp	Lys	Val	Asp
	130					135					140				
Glu	Leu	Met	Gln	Asp	Ile	Ala	Asp	Gln	Gln	Glu	Leu	Ala	Glu	Glu	Ile
145					150					155				160	
Ser	Thr	Ala	Ile	Ser	Lys	Pro	Val	Gly	Phe	Gly	Glu	Glu	Phe	Asp	Glu
				165					170					175	
Asp	Glu	Leu	Met	Ala	Glu	Leu	Glu	Glu	Leu	Glu	Gln	Glu	Glu	Leu	Asp
		180					185					190			
Lys	Asn	Leu	Leu	Glu	Ile	Ser	Gly	Pro	Glu	Thr	Val	Pro	Leu	Pro	Asn
	195						200					205			
Val	Pro	Ser	Ile	Ala	Leu	Pro	Ser	Lys	Pro	Ala	Lys	Lys	Lys	Glu	Glu
	210					215						220			
Glu	Asp	Asp	Asp	Met	Lys	Glu	Leu	Glu	Asn	Trp	Ala	Gly	Ser	Met	

225

230

235

&lt;210&gt; 6167

&lt;211&gt; 1220

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6167

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&lt;210&gt; 6168

&lt;211&gt; 90

&lt;212&gt; PRT

<213> Homo sapiens

<400> 6168

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 Ile Gln His Phe His Leu Ile Lys Thr Ser Leu Ile Phe Leu Cys Phe  
 35 40 45  
 Leu Phe His Gly Ile His Glu Asn Leu Leu Thr Val Gly Val Ser Lys  
 50 55 60  
 Glu Ala Tyr Leu Met Thr Ser Val Asn Gly Lys Asn Lys Thr Lys Met  
 65 70 75 80  
 Leu Tyr Gly Gln Ser His Lys Gly Lys Asp  
 85 90

<210> 6169

<211> 720

<212> DNA

<213> Homo sapiens

<400> 6169

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 720

<210> 6170

<211> 101

<212> PRT

<213> Homo sapiens

<400> 6170

Met Met Gln Glu Ser Gly Thr Glu Thr Lys Ser Asn Gly Ser Ala Ile

1                      5                      10                      15  
 Gln Asn Gly Ser Gly Gly Ser Asn His Leu Leu Glu Cys Gly Gly Leu  
                     20                      25                      30  
 Arg Glu Gly Arg Ser Asn Gly Glu Thr Pro Ala Val Asp Ile Gly Ala  
                     35                      40                      45  
 Ala Asp Leu Ala His Ala Gln Gln Gln Gln Gln Trp His Leu Ile  
                     50                      55                      60  
 Asn His Gln Pro Ser Arg Ser Pro Ser Ser Trp Leu Lys Arg Leu Ile  
                     65                      70                      75                      80  
 Ser Ser Pro Trp Glu Leu Glu Val Leu Gln Val Pro Cys Gly Glu Gln  
                     85                      90                      95  
 Leu Leu Arg Arg Arg  
                     100

&lt;210&gt; 6171

&lt;211&gt; 1130

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6171

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 420  
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<210> 6172

<211> 292

<212> PRT

<213> Homo sapiens

<400> 6172

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		20						25				30			
Phe	Gly	Asp	His	Pro	Ile	Pro	Gln	Tyr	Glu	Val	Asn	Pro	Arg	Thr	Thr
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Glu	Ile	Leu	His	His	Leu	Ser	Glu	Arg	Asn	Arg	Val	Arg	Asp	Arg	Asp
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65				70					75					80	
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145				150					155					160	
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			165					170						175	
Lys	Ala	Glu	Leu	His	Leu	Ser	Thr	Glu	Arg	Ala	Lys	Val	Asp	Asn	Arg
			180					185					190		
Arg	Gln	Asn	Met	Asp	Phe	Leu	Lys	Ala	Lys	Ser	Glu	Glu	Phe	Arg	Phe
		195				200						205			
Gly	Ile	Lys	Ala	Ala	Glu	Glu	Gln	Leu	Ser	Ala	Arg	Gly	Met	Asp	Ala
		210				215					220				
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Leu	Lys	Gln	Gln	Thr	Ile	Pro	Leu	Lys	Lys	Lys	Leu	Glu	Ser	Tyr	Leu
			245					250						255	
Asp	Leu	Met	Pro	Asn	Pro	Ser	Leu	Ala	Gln	Val	Lys	Ile	Glu	Glu	Ala
		260						265					270		
Lys	Arg	Glu	Leu	Asp	Ser	Ile	Glu	Ala	Glu	Leu	Thr	Arg	Arg	Val	Asp
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			290												

<210> 6173

<211> 1483

<212> DNA

<213> Homo sapiens

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<210> 6174



&lt;211&gt; 299

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6174

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      20           25           30
Gly Tyr Ala Leu Leu Val Ser Asp Leu Gln Gln Val Trp His Glu Gln
      35           40           45
Val Asp Thr Ser Val Val Ser Gln Arg Ala Lys Glu Leu Asn Lys Arg
      50           55           60
Leu Thr Ala Pro Pro Ala Ala Phe Leu Cys His Leu Asp Asn Leu Leu
      65           70           75           80
Arg Pro Leu Leu Lys Asp Ala Ala His Pro Ser Glu Ala Thr Phe Ser
      85           90           95
Cys Asp Cys Val Ala Asp Ala Leu Ile Leu Arg Val Arg Ser Glu Leu
      100          105          110
Ser Gly Leu Pro Phe Tyr Trp Asn Phe His Cys Met Leu Ala Ser Pro
      115          120          125
Ser Leu Val Ser Gln His Leu Ile Arg Pro Leu Met Gly Met Ser Leu
      130          135          140
Ala Leu Gln Cys Gln Val Arg Glu Leu Ala Thr Leu Leu His Met Lys
      145          150          155          160
Asp Leu Glu Ile Gln Asp Tyr Gln Glu Ser Gly Ala Thr Leu Ile Arg
      165          170          175
Asp Arg Leu Lys Thr Glu Pro Phe Glu Glu Asn Ser Phe Leu Glu Gln
      180          185          190
Phe Met Ile Glu Lys Leu Pro Glu Ala Cys Ser Ile Gly Asp Gly Lys
      195          200          205
Pro Phe Val Met Asn Leu Gln Asp Leu Tyr Met Ala Val Thr Thr Gln
      210          215          220
Glu Val Gln Val Gly Gln Lys His Gln Gly Ala Gly Asp Pro His Thr
      225          230          235          240
Ser Asn Ser Ala Ser Leu Gln Gly Ile Asp Ser Gln Cys Val Asn Gln
      245          250          255
Pro Glu Gln Leu Val Ser Ser Ala Pro Thr Leu Ser Ala Pro Glu Lys
      260          265          270
Glu Ser Thr Gly Thr Ser Gly Pro Leu Gln Arg Pro Gln Leu Ser Lys
      275          280          285
Val Lys Arg Lys Asn Pro Arg Gly Leu Phe Ser
      290          295

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&lt;210&gt; 6175

&lt;211&gt; 349

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6175

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120

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 240  
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<210> 6176  
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 <212> PRT  
 <213> Homo sapiens

<400> 6176  
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 Gly Glu Thr Asn Asp Phe Glu Leu Leu Lys Asn Gln Leu Leu Asp Pro  
 35 40 45  
 Asp Ile Lys Arg Leu Pro Trp Leu Asn Arg Ser Gln Thr Val Val Glu  
 50 55 60  
 Glu Tyr Leu Ala Phe Leu Gly Asn Leu Val Ser Ala Gln Thr Val Phe  
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<210> 6177  
 <211> 1536  
 <212> DNA  
 <213> Homo sapiens

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 120  
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 240  
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 300  
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 360  
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 420  
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 480  
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 720  
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&lt;210&gt; 6178

&lt;211&gt; 310

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6178

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Ser	Gly	Gly	Phe	Gln	Val	Lys	Leu	Tyr	Asp	Ile	Glu	Gln	Gln	Gln	Ile
			20					25					30		
Arg	Asn	Ala	Leu	Glu	Asn	Ile	Arg	Lys	Glu	Met	Lys	Leu	Leu	Glu	Gln
		35						40					45		
Ala	Gly	Ser	Leu	Lys	Gly	Ser	Leu	Ser	Val	Glu	Glu	Gln	Leu	Ser	Leu
		50				55						60			
Ile	Ser	Gly	Cys	Pro	Asn	Ile	Gln	Glu	Ala	Val	Glu	Gly	Ala	Met	His
65					70					75				80	
Ile	Gln	Glu	Cys	Val	Pro	Glu	Asp	Leu	Glu	Leu	Lys	Lys	Lys	Ile	Phe
			85					90						95	
Ala	Gln	Leu	Asp	Ser	Ile	Ile	Asp	Asp	Arg	Val	Ile	Leu	Ser	Ser	Ser
			100					105					110		
Thr	Ser	Cys	Leu	Met	Pro	Ser	Lys	Leu	Phe	Ala	Gly	Leu	Val	His	Val

115	120	125
Lys Gln Cys Ile Val Ala His Pro Val Asn Pro Pro Tyr Tyr Ile Pro		
130	135	140
Leu Val Glu Leu Val Pro His Pro Glu Thr Ala Pro Thr Thr Val Asp		
145	150	155
Arg Thr His Ala Leu Met Lys Lys Ile Gly Xaa Val Pro His Ala Ser		
165	170	175
Pro Glu Gly Gly Gly Arg Leu Arg Ser Glu Pro Pro Ala Ile Cys Asn		
180	185	190
His Gln Arg Gly Leu Ala Ala Ser Gly Gly Arg Asn Xaa Cys Leu Leu		
195	200	205
Val Thr Trp Xaa Leu Val Met Ser Glu Gly Leu Gly Met Arg Tyr Ala		
210	215	220
Phe Ile Gly Pro Leu Glu Thr Met His Leu Asn Ala Glu Gly Met Leu		
225	230	235
Ser Tyr Cys Asp Arg Tyr Ser Glu Gly Ile Lys His Val Leu Gln Thr		
245	250	255
Phe Gly Pro Ile Pro Glu Phe Ser Arg Ala Thr Ala Glu Lys Val Asn		
260	265	270
Gln Asp Met Cys Met Lys Val Pro Asp Asp Pro Glu His Leu Ala Ala		
275	280	285
Arg Arg Gln Trp Arg Asp Glu Cys Leu Met Arg Leu Ala Lys Leu Lys		
290	295	300
Ser Gln Val Gln Pro Gln		
305	310	

&lt;210&gt; 6179

&lt;211&gt; 2940

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6179

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<210> 6180

<211> 751

<212> PRT

<213> Homo sapiens

<400> 6180

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Arg	Val	Thr	Met	Asn	Phe	Ile	Trp	Pro	Phe	Leu	Met	Asn	Cys	Thr	Thr
			20					25					30		
Trp	Arg	Xaa	Tyr	Leu	Thr	Asp	Glu	Phe	Ala	Lys	Gly	Arg	Lys	Val	Ala
		35					40					45			
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	50					55					60				
Tyr	Leu	Leu	Ile	Thr	Val	Gly	Val	Val	Tyr	Val	Lys	Ser	Phe	Pro	Gln
65				70					75					80	
Ser	Arg	Lys	Asp	Ile	Leu	Lys	Asp	Leu	Val	Glu	Met	Cys	Arg	Gly	Val
			85					90						95	
Gln	His	Pro	Leu	Arg	Gly	Leu	Phe	Leu	Arg	Asn	Tyr	Leu	Leu	Gln	Cys
		100						105					110		
Thr	Arg	Asn	Ile	Leu	Pro	Asp	Glu	Gly	Glu	Pro	Thr	Asp	Glu	Glu	Thr
	115					120						125			
Thr	Gly	Asp	Ile	Ser	Asp	Ser	Met	Asp	Phe	Val	Leu	Leu	Asn	Phe	Ala
	130					135					140				
Glu	Met	Asn	Lys	Leu	Trp	Val	Arg	Met	Gln	His	Gln	Gly	His	Ser	Arg
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Asp	Arg	Glu	Lys	Arg	Glu	Arg	Glu	Arg	Gln	Glu	Leu	Arg	Ile	Leu	Val
			165					170						175	
Gly	Thr	Asn	Leu	Val	Arg	Leu	Ser	Xaa	Ser	Trp	Arg	Cys	Lys	Cys	Gly
	180						185					190			
Thr	Leu	Gln	Gln	Ile	Val	Leu	Thr	Gly	Ile	Leu	Glu	Gln	Val	Val	Asn

5361

625		630		635		640
Asn Gly Glu Glu Leu His Gly Gly Lys Arg Val Met Glu Cys Leu Lys						
	645		650		655	
Lys Ala Leu Lys Ile Ala Asn Gln Cys Met Asp Pro Ser Leu Gln Val						
	660		665		670	
Gln Leu Phe Ile Glu Ile Leu Asn Arg Tyr Ile Tyr Phe Tyr Glu Lys						
	675		680		685	
Glu Asn Asp Ala Val Thr Ile Gln Val Leu Asn Gln Leu Ile Gln Lys						
	690		695		700	
Ile Arg Glu Asp Leu Pro Asn Leu Glu Ser Ser Glu Glu Thr Glu Gln						
705		710		715		720
Ile Asn Lys His Phe His Asn Thr Leu Glu His Leu Arg Leu Arg Arg						
	725		730		735	
Glu Ser Pro Glu Ser Glu Gly Pro Ile Tyr Glu Gly Leu Ile Leu						
	740		745		750	

&lt;210&gt; 6181

&lt;211&gt; 1135

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6181

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240
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300
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480
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960

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<210> 6182

<211> 236

<212> PRT

<213> Homo sapiens

<400> 6182

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		20					25					30			
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	35					40					45				
Asp	Ala	Gln	Lys	His	Asp	Val	Glu	Val	Leu	Glu	Arg	Asn	Phe	Gln	Thr
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Ile	Leu	Cys	Glu	Phe	Glu	Thr	Leu	Tyr	Lys	Ala	Phe	Ser	Asn	Cys	Ser
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Thr	Phe	Tyr	Leu	Val	Asn	Gln	Gly	Val	Cys	Val	Pro	Arg	Asn	Cys	Arg
		100					105					110			
Lys	Cys	Pro	Arg	Thr	Tyr	Arg	Leu	Leu	Gly	Ser	Leu	Arg	Thr	Cys	Ile
		115					120					125			
Gly	Asn	Asn	Val	Phe	Gly	Asn	Ala	Cys	Ile	Ser	Val	Leu	Ser	Pro	Gly
	130				135						140				
Thr	Val	Ile	Thr	Glu	His	Tyr	Gly	Pro	Thr	Asn	Ile	Arg	Ile	Arg	Cys
145				150					155					160	
His	Leu	Gly	Leu	Lys	Thr	Pro	Asn	Gly	Cys	Glu	Leu	Val	Val	Gly	Gly
		165						170					175		
Glu	Pro	Gln	Cys	Trp	Ala	Glu	Gly	Arg	Cys	Leu	Leu	Phe	Asp	Asp	Ser
		180					185					190			
Phe	Leu	His	Ala	Ala	Phe	His	Glu	Gly	Ser	Ala	Glu	Asp	Gly	Pro	Arg
		195					200					205			
Val	Val	Phe	Met	Val	Asp	Leu	Trp	His	Pro	Asn	Val	Ala	Ala	Ala	Glu
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<210> 6183

<211> 2530

<212> DNA

<213> Homo sapiens

<400> 6183

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2520  
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2530

&lt;210&gt; 6184

&lt;211&gt; 308

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6184

Arg Ala Ser Thr Pro Tyr Leu Arg Pro Cys Leu Arg Glu Leu Arg Gly  
1 5 10 15  
Leu Gly Pro Gly Pro Val His Gly Arg Asp Pro Gly Pro Gly Gly Pro  
20 25 30  
Gly Met Gly Asn Arg Gly Gly Phe Arg Gly Gly Phe Gly Ser Gly Ile  
35 40 45  
Arg Gly Arg Gly Arg Gly Arg Gly Arg Gly Arg Gly Arg Gly  
50 55 60  
Ala Arg Gly Gly Lys Ala Glu Asp Lys Glu Trp Met Pro Val Thr Lys  
65 70 75 80  
Leu Gly Arg Leu Val Lys Asp Met Lys Ile Lys Ser Leu Glu Glu Ile  
85 90 95  
Tyr Leu Phe Ser Leu Pro Ile Lys Glu Ser Glu Ile Ile Asp Phe Phe  
100 105 110  
Leu Gly Ala Ser Leu Lys Asp Glu Val Leu Lys Ile Met Pro Val Gln  
115 120 125  
Lys Gln Thr Arg Ala Gly Gln Arg Thr Arg Phe Lys Ala Phe Val Ala  
130 135 140  
Ile Gly Asp Tyr Asn Gly His Val Gly Leu Gly Val Lys Cys Ser Lys

145                      150                      155                      160  
 Glu Val Ala Thr Ala Ile Arg Gly Ala Ile Ile Leu Ala Lys Leu Ser  
                          165                      170                      175  
 Ile Val Pro Val Arg Arg Gly Tyr Trp Gly Asn Lys Ile Gly Lys Pro  
                          180                      185                      190  
 His Thr Val Pro Cys Lys Val Thr Gly Arg Cys Gly Ser Val Leu Val  
                          195                      200                      205  
 Arg Leu Ile Pro Ala Pro Arg Gly Thr Gly Ile Val Ser Ala Pro Val  
                          210                      215                      220  
 Pro Lys Lys Leu Leu Met Met Ala Gly Ile Asp Asp Cys Tyr Thr Ser  
 225                      230                      235                      240  
 Ala Arg Gly Cys Thr Ala Thr Leu Gly Asn Phe Ala Lys Ala Thr Phe  
                          245                      250                      255  
 Asp Ala Ile Ser Lys Thr Tyr Ser Tyr Leu Thr Pro Asp Leu Trp Lys  
                          260                      265                      270  
 Glu Thr Val Phe Thr Lys Ser Pro Tyr Gln Glu Phe Thr Asp His Leu  
                          275                      280                      285  
 Val Lys Thr His Thr Arg Val Ser Val Gln Arg Thr Gln Ala Pro Ala  
                          290                      295                      300  
 Val Ala Thr Thr  
 305

&lt;210&gt; 6185

&lt;211&gt; 1231

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6185

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 180  
 ccaccctcta ggaccaaggt cactgcagta ttggatagga cctcagggag ttagcagggg  
 240  
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 300  
 cacaaccag ctgtgcaacc ctagacaagt gagttaatgt ccctgggcct cagtttcttc  
 360  
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 420  
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 600  
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 660  
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<213> Homo sapiens
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<210> 6187
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<212> DNA
<213> Homo sapiens
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5367

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 720  
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 780  
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 909

&lt;210&gt; 6188

&lt;211&gt; 227

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6188

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		20				25							30		
Glu	Ala	Leu	Leu	Asp	Glu	Asp	Thr	Leu	Phe	Cys	Gln	Gly	Leu	Glu	Val
		35				40						45			
Phe	Tyr	Pro	Glu	Leu	Gly	Asn	Ile	Gly	Cys	Lys	Val	Val	Pro	Asp	Cys
	50					55					60				
Asn	Asn	Tyr	Arg	Gln	Lys	Ile	Thr	Ser	Trp	Met	Glu	Pro	Ile	Val	Lys
	65				70				75					80	
Phe	Pro	Gly	Ala	Val	Tyr	Gly	Ala	Thr	Tyr	Ile	Leu	Val	Met	Val	Asp
		85				90							95		
Pro	Asp	Ala	Pro	Ser	Arg	Ala	Glu	Pro	Arg	Gln	Arg	Phe	Trp	Arg	His
		100				105						110			
Trp	Leu	Val	Thr	Asp	Ile	Lys	Gly	Ala	Asp	Leu	Lys	Lys	Gly	Lys	Ile
		115				120						125			
Gln	Gly	Gln	Glu	Leu	Ser	Ala	Tyr	Gln	Ala	Pro	Ser	Pro	Pro	Ala	His
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Ser	Gly	Phe	His	Arg	Tyr	Gln	Phe	Phe	Val	Tyr	Leu	Gln	Glu	Gly	Lys
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Val	Ile	Ser	Leu	Leu	Pro	Lys	Glu	Asn	Lys	Thr	Arg	Gly	Ser	Trp	Lys

	165		170		175										
Met	Asp	Arg	Phe	Leu	Asn	Arg	Phe	His	Leu	Gly	Glu	Pro	Glu	Ala	Ser
	180		185		190										
Thr	Gln	Phe	Met	Thr	Gln	Asn	Tyr	Gln	Asp	Ser	Pro	Thr	Leu	Gln	Ala
	195		200		205										
Pro	Arg	Glu	Arg	Ala	Ser	Glu	Pro	Lys	His	Lys	Asn	Gln	Ala	Glu	Ile
	210		215		220										
Ala	Ala	Cys													
225															

&lt;210&gt; 6189

&lt;211&gt; 2761

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6189

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1140

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a

2761

&lt;210&gt; 6190

&lt;211&gt; 576

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6190

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Pro Gly Pro Val Val Trp Pro Asn Pro Leu Ala Trp Gln Asn Pro Pro
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Gly Trp Gln Thr Pro Pro Gly Trp Gln Thr Pro Pro Gly Trp Gln Gly
      180              185              190
Pro Pro Asp Trp Gln Gly Pro Pro Asp Trp Pro Leu Pro Pro Asp Trp
      195              200              205
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Asp Trp Ile Pro Ala Asp Trp Pro Ile Pro Pro Asp Trp Gln Asn Leu
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Pro Ile Lys Arg Ser Glu Met Leu Arg Asp Ile Ile Arg Glu Tyr Thr
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&lt;210&gt; 6191

&lt;211&gt; 3021

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6191

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&lt;210&gt; 6192

&lt;211&gt; 815

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6192

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Asp	Asp	Thr	His	Tyr	Phe	Val	Met	Thr	Ala	Lys	Lys	Gln	Cys	Leu	Leu
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Arg	Leu	Gly	Val	Leu	Arg	Gln	Asp	Trp	Pro	Asp	Thr	Asn	Arg	Leu	Leu
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Gln	Asp	Ala	His	Gly	Gln	Pro	Asp	Val	Ser	Ala	Phe	Asp	Phe	Thr	Ser
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Pro	Leu	Gly	Thr	Gly	Val	Ala	Arg	Gly	Phe	Leu	Ala	Ala	Phe	Asp	Ala

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 Asp Leu Tyr Asp Val Leu Ala Lys Glu Pro Val Gln Arg Asn Asn Asp  
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    420                                      425                                      430  
 Pro Ser Gln His Gln Glu Ala Gly Ala Gly Asp Leu Cys Ala Leu Cys  
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 Phe His Arg Ser Cys Phe Arg Cys His Thr Cys Glu Ala Thr Leu Trp  
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 Gln His Leu Pro Gln Thr Asp His Lys Ala Glu Gly Ser Asp Arg Gly  
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 Gly Leu Ser Thr Pro Thr Ala Ser Gln Glu Gly Ala Gly Pro Val Pro  
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 Asp Pro Ser Gln Pro Thr Arg Arg Gln Ile Arg Leu Ser Ser Pro Glu  
 545                                      550                                      555                                      560  
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<210> 6193
<211> 2893
<212> DNA
<213> Homo sapiens
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<211> 621

<212> PRT

<213> Homo sapiens

<400> 6194

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Val	Pro	Asn	Val	Phe	Pro	Ser	Ser	Gly	Asp	Phe	Thr	Gln	Thr	Ala	Val
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Phe	Arg	Thr	Tyr	Gly	Thr	Trp	Trp	Asp	Gln	Cys	Pro	Ser	Ala	Ser	Leu
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5379

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6197

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&lt;210&gt; 6198

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6198

Met Gly Ala Ser His Gly Asn Trp Glu Val Pro Arg Gln Ser Gln Arg

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Phe	His	Arg	Arg	Ser	Gln	Arg	Val	Thr	Lys	Gly	Ser	Pro	Gly	Pro	Gly
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Ser	Ser	Gln	His	His	Gly	Leu	Asn	Thr	His	Trp	Ala	Pro	Thr	Leu	Gly
		35					40					45			
Pro	Gly	Trp	Gly	Met	Trp	Gly	Gln	Glu	Ala	Ala	Gln	Ser	Gly	Arg	Gln
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Leu	Arg	Leu	Trp	Leu	Gly	Ser	Ala	Ser	Arg	Val	Ser	Tyr	Val	Leu	Cys
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Ser	Tyr	Phe	Leu	Ser	Pro	Thr	Leu	Pro	Cys	Arg	Asn	Pro	Ser	Glu	Tyr
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&lt;210&gt; 6199

&lt;211&gt; 1777

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6199

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1777

&lt;210&gt; 6200

&lt;211&gt; 164

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6200

Val	Gly	Val	Gly	Ser	Ser	Ala	Glu	Pro	Ser	Arg	His	Gly	Cys	Pro	Leu
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Phe	Trp	Glu	Glu	Gly	Ser	Ala	Pro	Arg	Pro	Gln	Glu	Ser	Arg	Gln	Arg
		20						25					30		
Pro	Pro	Lys	Pro	Asp	Cys	Gln	Gln	Lys	Pro	Ser	Pro	Ser	Glu	Gly	Gln
		35					40					45			
Val	Gly	Val	Pro	Xaa	Arg	Ser	Pro	His	Pro	Gln	Gly	Gly	Phe	Thr	His
		50				55					60				
Cys	Pro	Val	Pro	Gly	Met	Pro	Gly	Gly	Arg	Pro	Leu	Cys	Cys	Cys	His
65					70				75					80	
Cys	Cys	Gln	His	Cys	Pro	Ala	Cys	Glu	Ala	Arg	Arg	Ser	Pro	Cys	Pro
			85					90					95		
Thr	Arg	Cys	Cys	Cys	Ser	Ser	Asp	Pro	Cys	Cys	Glu	Glu	Trp	Asp	Ser
		100					105						110		
Trp	Ser	Lys	Lys	Leu	Val	Phe	Leu	Phe	Cys	Ile	Asn	Glu	Lys	Asn	Pro
		115					120					125			
Gly	Glu	Ala	Ala	Thr	Leu	Pro	Ser	Gln	Arg	Asp	Ala	Leu	Pro	Cys	Phe
		130				135						140			
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150

155

160

<210> 6201

<211> 604

<212> DNA

<213> Homo sapiens

<400> 6201

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gccg  
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<210> 6202

<211> 124

<212> PRT

<213> Homo sapiens

<400> 6202

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Pro	Ser	Asp	Arg	Met	Arg	Asp	Arg	Asn	Ala	Gln	Gln	Arg	Ala	Ile	Gln
		20						25					30		
Gly	Gln	Trp	Thr	Leu	Gly	Arg	Gly	Ala	Glu	Trp	Ala	Ala	Leu	Arg	Arg
		35					40					45			
Ala	Gly	Leu	Arg	Gly	Cys	Arg	Glu	Glu	Phe	Gly	Gly	Lys	Gly	Gln	Pro
	50				55					60					
Gln	Ser	Leu	Ser	Cys	Ala	Ser	Trp	Glu	Arg	Gly	Met	Thr	Gly	Arg	His
65				70					75				80		
Thr	Asn	Val	Ser	Gln	Gly	Arg	Trp	Ala	Trp	Gly	His	Arg	Ala	Pro	Arg
				85					90				95		
Gly	Gly	Ser	Gly	Glu	Gly	Glu	Pro	Ala	Glu	Glu	Arg	Pro	Gly	Arg	Ala
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Gly	Asp	His	Ala	Gly	Ala	Gln	Gly	Glu	Arg	Gln	Asp				

115

120

&lt;210&gt; 6203

&lt;211&gt; 3462

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6203

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<210> 6204

<211> 486

<212> PRT

<213> Homo sapiens

<400> 6204

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Lys	Ala	Trp	Met	Ala	Phe	Met	Ser	Glu	Ala	Glu	Arg	Val	Ser	Glu	Leu
			85						90					95	
His	Leu	Glu	Val	Lys	Ala	Ser	Leu	Met	Asn	Asp	Asp	Phe	Glu	Lys	Ile
			100					105					110		
Lys	Asn	Trp	Gln	Lys	Glu	Ala	Phe	His	Lys	Gln	Met	Met	Gly	Gly	Phe
	115					120						125			
Lys	Glu	Thr	Lys	Glu	Ala	Glu	Asp	Gly	Phe	Arg	Lys	Ala	Gln	Lys	Pro
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Trp	Ala	Lys	Lys	Leu	Lys	Glu	Val	Glu	Ala	Ala	Lys	Lys	Ala	His	His
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Leu	Arg	Phe	Phe	Arg	Glu	Val	Leu	Leu	Glu	Val	Gln	Lys	His	Leu	Asp

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                275                280                285
Asn His Gly Pro Gly Met Ala Met Asn Trp Pro Gln Phe Glu Glu Trp
                290                295                300
Ser Ala Asp Leu Asn Arg Thr Leu Ser Arg Arg Glu Lys Lys Lys Ala
305                310                315                320
Thr Asp Gly Val Thr Leu Thr Gly Ile Asn Gln Thr Gly Asp Gln Ser
                325                330                335
Leu Pro Ser Lys Pro Ser Ser Thr Leu Asn Val Pro Ser Asn Pro Ala
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Gln Ser Ala Gln Ser Gln Ser Ser Tyr Asn Pro Phe Glu Asp Glu Asp
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Asp Thr Gly Ser Thr Val Ser Glu Lys Asp Asp Thr Lys Ala Lys Asn
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Val Ser Ser Tyr Glu Lys Thr Gln Ser Tyr Pro Thr Asp Trp Ser Asp
385                390                395                400
Asp Glu Ser Asn Asn Pro Phe Ser Ser Thr Asp Ala Asn Gly Asp Ser
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Asn Pro Phe Asp Asp Asp Ala Thr Ser Gly Thr Glu Val Arg Val Arg
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Ala Leu Tyr Asp Tyr Glu Gly Gln Glu His Asp Glu Leu Ser Phe Lys
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Ala Gly Asp Glu Leu Thr Lys Met Glu Asp Glu Asp Glu Gln Gly Trp
                450                455                460
Cys Lys Gly Arg Leu Asp Asn Gly Gln Val Gly Leu Tyr Pro Ala Asn
465                470                475                480
Tyr Val Glu Ala Ile Gln
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&lt;210&gt; 6205

&lt;211&gt; 926

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6205

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480

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&lt;210&gt; 6206

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6206

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Glu	Met	Glu	Lys	Trp	Gly	Glu	Asp	Phe	Gly	Glu	Ser	Arg	Gly	Arg	Ala
			20					25					30		
Arg	Glu	Gly	Lys	Glu	Phe	Ala	Asp	Ser	Gln	Lys	Leu	Leu	Phe	Met	Glu
			35					40					45		
Thr	Ser	Ala	Lys	Leu	Asn	His	Gln	Val	Ser	Glu	Val	Phe	Asn	Thr	Val
			50					55					60		
Ala	Gln	Glu	Leu	Leu	Gln	Arg	Ser	Asp	Glu	Glu	Gly	Gln	Ala	Leu	Xaa
65					70					75				80	
Gly	Glu	Asp	Thr	Pro	Cys	Leu	Gly	His	Gly	Gln	Leu				
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&lt;210&gt; 6207

&lt;211&gt; 1384

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6207

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 300  
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 aaaa  
 1384

&lt;210&gt; 6208

&lt;211&gt; 290

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6208

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Ala	Ser	Leu	Glu	Lys	Asn	Pro	Tyr	Gln	Ala	Val	His	Gln	Trp	Ala	Phe
		20						25					30		
Ser	Ala	Gly	Leu	Ser	Leu	Val	Gly	Leu	Leu	Thr	Leu	Gly	Ala	Val	Leu
		35					40					45			
Ser	Ala	Ala	Ala	Thr	Val	Arg	Glu	Ala	Gln	Gly	Leu	Met	Ala	Gly	Gly
		50				55				60					
Phe	Leu	Cys	Phe	Ser	Leu	Ala	Phe	Xaa	Ala	Gln	Val	Gln	Val	Val	Phe
65					70					75				80	
Trp	Arg	Leu	His	Ser	Pro	Thr	Gln	Val	Glu	Asp	Ala	Met	Leu	Asp	Thr

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<210> 6209
<211> 2269
<212> DNA
<213> Homo sapiens
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240
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<210> 6210

<211> 165

<212> PRT

<213> Homo sapiens

<400> 6210

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			20					25					30		
Ser	Pro	Ser	Leu	Arg	Gly	Thr	His	Leu	Leu	Phe	Leu	Pro	Gln	Ala	Asp
		35					40					45			
Val	Val	Asp	Glu	Ala	Ile	Asp	Ser	Leu	Ala	Arg	Thr	Lys	Gly	Val	Met
	50					55					60				
Lys	Pro	Pro	Cys	Ser	Glu	Gly	Ser	Pro	Trp	Arg	Cys	Pro	His	Phe	Thr
65					70					75				80	
Cys	Trp	Val	Leu	Gln	Ala	Arg	Lys	Pro	Gly	Ser	Gly	Gly	Thr	Arg	Glu
				85					90					95	
Arg	Gln	Ala	Cys	Val	Trp	Thr	Ser	Ala	Gly	Ala	Ala	Ala	Leu	Arg	Leu
			100					105					110		
Ala	Arg	Glu	Arg	Gln	Arg	Trp	Val	Phe	Arg	Phe	His	Ala	Tyr	Val	Trp
			115				120					125			
Ala	His	Ser	Gln	His	Gly	Arg	Val	Ser	Ala	Val	Leu	Val	Leu	Thr	Leu
	130					135					140				
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<210> 6211

<211> 2163

<212> DNA

<213> Homo sapiens

<400> 6211

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300  
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420  
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2100

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 aaa  
 2163

<210> 6212  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

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 Lys Gln Glu Leu Ala Glu Thr Leu Ala Asn Leu Glu Arg Gln Ile Tyr  
 35 40 45  
 Ala Phe Glu Gly Ser Tyr Leu Glu Asp Thr Gln Met Tyr Gly Asn Ile  
 50 55 60  
 Ile Arg Gly Trp Xaa Ser Val Ser Asp Gln Pro Xaa Lys Asn Ser Asn  
 65 70 75 80  
 Ser Lys Asn Asp Arg Arg Asn Arg Lys Phe Lys Glu Ala Glu Arg Leu  
 85 90 95  
 Phe Ser Lys Ser Ser Val Thr Ser Ala Ala Val Ser Ala Leu Ala  
 100 105 110  
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 115 120 125  
 Glu Ser Asp Thr Ser Pro Asp Phe His Asn Gln Glu Asn Glu Pro Ser  
 130 135 140  
 Gln Glu Asp Pro Glu Asp Leu Asp Gly Ser Val Gln Gly Val Lys Pro  
 145 150 155 160  
 Gln Lys Ala Ala Ser Ser Thr Ser Ser Gly Ser His His Ser Ser His  
 165 170 175  
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<210> 6213  
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 <212> DNA  
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 1160

&lt;210&gt; 6214

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6214

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 Glu Pro Ala Xaa Cys Leu His Gln Thr Gly Pro His Leu Gly Pro Pro  
 35 40 45  
 Pro Pro Pro Pro Thr Pro Pro Thr Cys Ile Ala Gln Ile Gln  
 50 55 60  
 Val Met Met Glu Gln Ile Arg Pro Trp His Ser Arg Met Lys Arg Arg  
 65 70 75 80  
 Lys Gly Val Met Glu Gly Gln Ser Leu Glu Pro Ala Ala Ser Ser Gly  
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 Pro Leu Pro Thr Asp  
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<210> 6215  
 <211> 651  
 <212> DNA  
 <213> Homo sapiens

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 180  
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<210> 6216  
 <211> 87  
 <212> PRT  
 <213> Homo sapiens

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 Glu Ala Val Ala Ile Gly Pro Arg Gly Cys Ser Gly Ser Leu Arg Trp  
 35 40 45  
 Leu Gln Glu Ser Asp Ala Ala Pro Leu Pro Leu Ser Cys His Leu Ala  
 50 55 60  
 Ala His Arg Ala Leu Gln Gly Arg Ser Arg Gly Gly Leu Ser Gly Cys  
 65 70 75 80  
 Pro Glu Arg Gly Leu Ser Asp  
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<210> 6217  
 <211> 2955  
 <212> DNA  
 <213> Homo sapiens

<400> 6217

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&lt;210&gt; 6218

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6218

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Lys Tyr Lys Ala Ala	Lys Asn Pro Ser Pro Thr Arg	Pro Val Ser	
65	70	75	80
Arg Arg Cys Ala Ile	Asn Ala Arg Asn Ala Leu Thr	Ala Leu Phe Thr	
85	90	95	
Ser Ser Gly Arg Pro	Pro Ser Gln Pro Asn Thr Gln Asp	Lys Thr Pro	
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Ser Lys Val Thr Ala	Arg Pro Ser Gln Pro Pro Leu	Pro Arg Arg Ser	
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Thr Arg Leu Lys Thr			
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&lt;210&gt; 6219

&lt;211&gt; 2495

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6219

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 <211> 179  
 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Gly Gly Pro Ala Pro Ser Pro Gln Xaa Tyr Ile His Asp Ser Pro Ser  
 50 55 60  
 Cys Trp Pro Trp Thr Lys Ala Gly Ser Ser Xaa Cys Pro Val Arg Ser  
 65 70 75 80  
 Pro Tyr Ser Pro Pro Ala Ala Arg Pro Gly Pro Gly Xaa Pro Leu Trp  
 85 90 95  
 Cys Gln Arg Val Ser Gln Asn Pro Gly Pro Ser Pro Ser Xaa Gly Pro  
 100 105 110  
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 115 120 125  
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<210> 6221  
 <211> 1487  
 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 6222

&lt;211&gt; 330

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6222

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Lys	Leu	His	Lys	Cys	Lys	Glu	Phe	Val	Asp	Ser	Cys	Arg	Leu	Thr	Phe
		35					40				45				
Pro	Thr	Ser	Gly	Asp	Glu	Tyr	Ser	Arg	Gly	Phe	Leu	Gln	Asn	Leu	Asn
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Leu	Ile	Gln	Asp	Gln	Asn	Ala	Gln	Thr	Arg	Trp	Lys	Gln	Gly	Arg	Tyr
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Asp	Glu	Asp	Gly	Lys	Pro	Phe	Asn	Gln	Arg	Ser	Leu	Leu	Leu	Gly	His
				85				90						95	
Glu	Arg	Ile	Leu	Thr	Arg	Ala	Lys	Ser	Tyr	Glu	Cys	Ser	Glu	Cys	Gly

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Ser	Lys	Cys	Glu	Lys	Thr	Phe	Ser	Gln	Asn	Ser	Thr	Leu	Ile	Arg	His	
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Ser	Lys	Pro	Asn	Thr	His	Lys	Cys	Ser	Glu	Cys	Gly	Gln	Ser	Phe	Gly	
				245					250						255	
Arg	Asn	Val	Asp	Leu	Ile	Gln	His	Gln	Arg	Ile	His	Thr	Lys	Glu	Glu	
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Phe	Phe	Gln	Cys	Gly	Glu	Cys	Gly	Lys	Thr	Phe	Ser	Phe	Lys	Arg	Asn	
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Leu	Phe	Arg	His	Gln	Val	Ile	His	Thr	Gly	Ser	Gln	Leu	Tyr	Gln	Cys	
		290					295				300					
Val	Ile	Cys	Gly	Lys	Ser	Phe	Lys	Trp	His	Thr	Ser	Phe	Ile	Lys	His	
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<210> 6223

<211> 944

<212> DNA

<213> Homo sapiens

<400> 6223

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<210> 6224  
 <211> 156  
 <212> PRT  
 <213> Homo sapiens

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 Ala Glu Gly His Val Gly Gln Gly Ala Pro Gly Leu Met Gly Asn Met  
 35 40 45  
 Asn Pro Glu Gly Gly Val Asn His Glu Asn Gly Met Asn Arg Asp Gly  
 50 55 60  
 Gly Met Ile Pro Glu Gly Gly Gly Asn Gln Glu Pro Arg Gln Gln  
 65 70 75 80  
 Pro Gln Pro Pro Pro Glu Glu Pro Ala Gln Ala Ala Met Glu Gly Pro  
 85 90 95  
 Gln Pro Glu Asn Met Gln Pro Arg Thr Arg Arg Thr Lys Phe Thr Leu  
 100 105 110  
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 Asp Lys Val Arg Val Ser Thr Leu Glu Lys Ala Ile  
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<210> 6225  
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 <213> Homo sapiens

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<210> 6226

<211> 246

<212> PRT

<213> Homo sapiens

<400> 6226

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Gln	Gly	Asp	Phe	Ile	Lys	Cys	Val	Glu	Gln	Lys	Thr	Asp	Ala	Leu	Gly
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Lys	Gln	Ser	Val	Asn	Arg	Gly	Phe	Thr	Lys	Asp	Lys	Thr	Leu	Ser	Ser
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245

&lt;210&gt; 6227

&lt;211&gt; 830

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6227

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&lt;210&gt; 6228

&lt;211&gt; 271

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6228

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20           25           30
Ile Pro Ser Pro Gly Arg Val Ala Ala Glu Trp Glu Val Gln Asn Arg
35           40           45
Ile Pro Ser Gly Thr Ile Leu Lys Ala Leu Met Glu Gly Gly Glu Asn
50           55           60
Gly Pro Trp Met Arg Phe Met Arg Ala Glu Ile Thr Ala Glu Gly Phe
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Leu Arg Glu Phe Gly Arg Leu Cys Ser Glu Met Leu Lys Thr Ser Val

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Gln Phe Pro Val Met Thr Glu Ala Ile Thr Gln Ile Arg Ala Lys Gly
      115              120              125
Leu Gln Thr Ala Val Leu Ser Asn Asn Phe Tyr Leu Pro Asn Gln Lys
      130              135              140
Ser Phe Leu Pro Leu Asp Arg Lys Gln Phe Asp Val Ile Val Glu Ser
145      150      155      160
Cys Met Glu Gly Ile Cys Lys Pro Asp Pro Arg Ile Tyr Lys Leu Cys
      165              170              175
Leu Glu Gln Leu Gly Leu Gln Pro Ser Glu Ser Ile Phe Leu Asp Asp
      180              185              190
Leu Gly Thr Asn Leu Lys Glu Ala Ala Arg Leu Gly Ile His Thr Ile
      195              200              205
Lys Val Asn Asp Pro Glu Thr Ala Val Lys Glu Leu Glu Ala Leu Leu
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Gly Phe Thr Leu Arg Val Gly Val Pro Asn Thr Arg Pro Val Lys Lys
225      230      235      240
Thr Met Glu Ile Pro Lys Asp Ser Leu Gln Lys Tyr Leu Lys Asp Leu
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&lt;210&gt; 6229

&lt;211&gt; 3105

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6229

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<210> 6230

<211> 944

<212> PRT

<213> Homo sapiens

<400> 6230

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Ser	Leu	Val	Ser	Ala	Leu	Asp	Ser	Met	Cys	Ser	Ala	Leu	Ser	Lys	Leu
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Gln	Ser	Asp	Phe	Leu	Arg	Phe	Cys	Arg	Gly	Pro	Pro	Trp	Lys	Asp	Pro
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Glu	Ala	Glu	His	Pro	Lys	Lys	Val	Gln	Arg	Gly	Glu	Gly	Gly	Gly	Arg
		100						105					110		
Ser	Leu	Pro	Arg	Ser	Ser	Leu	Glu	His	Gly	Ser	Asp	Val	Tyr	Leu	Leu
		115				120					125				
Arg	Lys	Met	Val	Glu	Glu	Val	Phe	Asp	Val	Leu	Tyr	Ser	Glu	Ala	Leu
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Pro	Gly	Leu	Leu	Ala	Val	Gln	Gly	Leu	Pro	Glu	Gly	Leu	Ala	Phe	Arg

5414

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Lys Ile Leu Glu Ala Ser	Asn Ser Ile Gln Phe	Val Ile Lys Arg Pro
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Glu Leu Leu Thr Glu Gly	Val Lys Glu Pro Ile	Val Asp Ser Gln Glu
645	650	655
Arg Asp Ser Gly Asp Pro	Leu Val Asp Glu Ser	Leu Lys Arg Gln Gly
660	665	670
Phe Gln Glu Asn Tyr Asp	Ala Arg Leu Ser Arg	Ile Asp Ile Ala Asn
675	680	685
Thr Leu Arg Glu Gln Val	Gln Asp Leu Phe Asn	Lys Lys Tyr Gly Glu
690	695	700
Ala Leu Gly Ile Lys Tyr	Pro Val Gln Val Pro	Tyr Lys Arg Ile Lys
705	710	715
Ser Asn Pro Gly Ser Val	Ile Ile Glu Gly Leu	Pro Pro Gly Ile Pro
725	730	735
Phe Arg Lys Pro Cys Thr	Phe Gly Ser Gln Asn	Leu Glu Arg Ile Leu
740	745	750
Ala Val Ala Asp Lys Ile	Lys Phe Thr Val Thr	Arg Pro Phe Gln Gly
755	760	765
Leu Ile Pro Lys Pro Asp	Glu Asp Asp Ala Asn	Arg Leu Gly Glu Lys
770	775	780
Val Ile Leu Arg Glu Gln	Val Lys Glu Leu Phe	Asn Glu Lys Tyr Gly
785	790	795
Glu Ala Leu Gly Leu Asn	Arg Pro Val Leu Val	Pro Tyr Lys Leu Ile
805	810	815
Arg Asp Ser Pro Asp Ala	Val Glu Val Thr Gly	Leu Pro Asp Asp Ile
820	825	830
Pro Phe Arg Asn Pro Asn	Thr Tyr Asp Ile His	Arg Leu Glu Lys Ile
835	840	845
Leu Lys Ala Arg Glu His	Val Arg Met Val Ile	Ile Asn Gln Leu Gln
850	855	860
Pro Phe Ala Glu Ile Cys	Asn Asp Ala Lys Val	Pro Ala Lys Asp Ser
865	870	875
Ser Ile Pro Lys Arg Lys	Arg Lys Arg Val Ser	Glu Gly Asn Ser Val
885	890	895
Ser Ser Ser Ser Ser Ser	Ser Ser Ser Ser Asn	Pro Asp Ser
900	905	910
Val Ala Ser Ala Asn Gln	Ile Ser Leu Val Gln	Trp Pro Met Tyr Met
915	920	925
Val Asp Tyr Ala Gly Leu	Asn Val Gln Leu Pro	Gly Pro Leu Asn Tyr
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&lt;210&gt; 6231

&lt;211&gt; 471

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6231

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<212> PRT

<213> Homo sapiens

<400> 6232

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			20					25					30		
Lys	Lys	Ser	Met	Leu	Gly	Gln	Lys	Ser	Gly	Pro	Ser	Gly	Leu	Leu	Thr
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Trp	Arg	Arg	Lys	Arg	Gly	Pro	Lys	Pro	Pro	Val	Ala	Pro	Ile	Ser	Ile
	50				55					60					
Trp	Asn	Gly	Thr	Thr	Pro	Arg	Gly	Glu	Pro	Pro	Pro	Asn	His	Ser	Ser
65					70				75					80	
Lys	Lys	Gly	Thr	Lys	Lys	Trp	Ala	Leu	Asp	Phe	Ser	Thr	Pro	Glu	Thr
			85				90						95		
Gln	Phe	Pro	Pro	Pro	Gly	Arg	Pro	Phe	Leu	Gly	Ile	Pro	Thr	Trp	Asp
		100					105					110			
Pro	Thr	Trp	Ala	Tyr	Ser	Gly	Pro	Tyr	Leu	Phe	Leu	Val	Gly	Ile	Gly
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<212> DNA

<213> Homo sapiens

<400> 6233

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<210> 6234

<211> 230

<212> PRT

<213> Homo sapiens

<400> 6234

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			20					25					30		
Glu	Ala	Leu	Met	Leu	Arg	Asp	Gly	Arg	Phe	Ala	Cys	Ala	Ile	Cys	Pro
		35					40				45				
His	Arg	Pro	Val	Leu	Asp	Thr	Leu	Ala	Met	Leu	Thr	Ala	His	Arg	Ala
	50					55					60				
Gly	Lys	Lys	His	Leu	Ser	Ser	Leu	Gln	Leu	Phe	Tyr	Gly	Lys	Lys	Gln
65				70					75					80	
Pro	Gly	Lys	Glu	Arg	Lys	Gln	Asn	Pro	Lys	His	Gln	Asn	Glu	Leu	Arg
			85					90					95		
Arg	Glu	Glu	Thr	Lys	Ala	Glu	Ala	Pro	Leu	Leu	Thr	Gln	Thr	Arg	Leu
			100					105					110		
Ile	Thr	Gln	Ser	Ala	Leu	His	Arg	Ala	Pro	His	Tyr	Asn	Ser	Cys	Cys
		115					120					125			
Arg	Arg	Lys	Tyr	Arg	Pro	Glu	Ala	Pro	Gly	Pro	Ser	Val	Ser	Leu	Ser
	130					135					140				
Pro	Met	Pro	Pro	Ser	Glu	Val	Lys	Leu	Gln	Ser	Gly	Lys	Ile	Ser	Arg
145				150					155					160	
Glu	Pro	Glu	Pro	Ala	Ala	Gly	Pro	Gln	Ala	Glu	Glu	Ser	Ala	Thr	Val
			165					170					175		
Ser	Ala	Pro	Ala	Pro	Met	Ser	Pro	Thr	Arg	Arg	Arg	Ala	Leu	Asp	His
			180					185					190		
Tyr	Leu	Thr	Leu	Arg	Ser	Ser	Gly	Trp	Ile	Pro	Asp	Gly	Arg	Gly	Arg
		195					200					205			
Trp	Val	Lys	Asp	Glu	Asn	Val	Glu	Phe	Asp	Ser	Asp	Glu	Glu	Glu	Pro

210  
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 230  
 220

<210> 6235  
 <211> 3427  
 <212> DNA  
 <213> Homo sapiens

<400> 6235  
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<210> 6236

<211> 820

<212> PRT

<213> Homo sapiens

<400> 6236

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			20					25					30		
Pro	Glu	Gly	Gly	Leu	Pro	Gly	Pro	Trp	Ala	Leu	His	Arg	Gly	Arg	Lys
		35				40						45			
Lys	Ala	Thr	Gly	Ser	Pro	Val	Ser	Ile	Phe	Val	Tyr	Asp	Val	Lys	Pro
	50					55					60				
Gly	Ala	Glu	Glu	Gln	Thr	Gln	Val	Ala	Lys	Ala	Ala	Phe	Lys	Arg	Phe
65				70					75					80	
Lys	Thr	Leu	Arg	His	Pro	Asn	Ile	Leu	Ala	Tyr	Ile	Asp	Gly	Leu	Glu
			85					90					95		
Thr	Glu	Lys	Cys	Leu	His	Val	Val	Thr	Glu	Ala	Val	Thr	Pro	Leu	Gly
			100					105					110		
Ile	Tyr	Leu	Lys	Ala	Arg	Val	Glu	Ala	Gly	Gly	Leu	Lys	Glu	Leu	Glu
		115				120					125				
Ile	Ser	Trp	Gly	Leu	His	Gln	Ile	Val	Lys	Ala	Leu	Ser	Phe	Leu	Val
	130					135					140				
Asn	Asp	Cys	Ser	Leu	Ile	His	Asn	Asn	Val	Cys	Met	Ala	Ala	Val	Phe
145				150					155					160	
Val	Asp	Arg	Ala	Gly	Glu	Trp	Lys	Leu	Gly	Gly	Leu	Asp	Tyr	Met	Tyr
			165					170					175		
Ser	Ala	Gln	Gly	Asn	Gly	Gly	Gly	Pro	Pro	Arg	Lys	Gly	Ile	Pro	Glu
		180						185					190		
Leu	Glu	Gln	Tyr	Asp	Pro	Pro	Glu	Leu	Ala	Asp	Ser	Ser	Gly	Arg	Val
		195				200					205				
Val	Arg	Glu	Lys	Trp	Ser	Ala	Asp	Met	Trp	Arg	Leu	Gly	Cys	Leu	Ile
	210					215					220				
Trp	Glu	Val	Phe	Asn	Gly	Pro	Leu	Pro	Arg	Ala	Ala	Ala	Leu	Arg	Asn

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225          230          235          240
Pro Gly Lys Ile Pro Lys Thr Leu Val Pro His Tyr Cys Glu Leu Val
          245          250          255
Gly Ala Asn Pro Lys Val Arg Pro Asn Pro Ala Arg Phe Leu Gln Asn
          260          265          270
Cys Arg Ala Pro Gly Gly Phe Met Ser Asn Arg Phe Val Glu Thr Asn
          275          280          285
Leu Phe Leu Glu Glu Ile Gln Ile Lys Glu Pro Ala Glu Lys Gln Lys
          290          295          300
Phe Phe Gln Glu Leu Ser Lys Ser Leu Asp Ala Phe Pro Glu Asp Phe
305          310          315          320
Cys Arg His Lys Val Leu Pro Gln Leu Leu Thr Ala Phe Glu Phe Gly
          325          330          335
Asn Ala Gly Ala Val Val Leu Thr Pro Leu Phe Lys Val Gly Lys Phe
          340          345          350
Leu Ser Ala Glu Glu Tyr Gln Gln Lys Ile Ile Pro Val Val Val Lys
          355          360          365
Met Phe Ser Ser Thr Asp Arg Ala Met Arg Ile Arg Leu Leu Gln Gln
          370          375          380
Met Glu Gln Phe Ile Gln Tyr Leu Asp Glu Pro Thr Val Asn Thr Gln
385          390          395          400
Ile Phe Pro His Val Val His Gly Phe Leu Asp Thr Asn Pro Ala Ile
          405          410          415
Arg Glu Gln Thr Val Lys Ser Met Leu Leu Leu Ala Pro Lys Leu Asn
          420          425          430
Glu Ala Asn Leu Asn Val Glu Leu Met Lys His Phe Ala Arg Leu Gln
          435          440          445
Ala Lys Asp Glu Gln Gly Pro Ile Arg Cys Asn Thr Thr Val Cys Leu
          450          455          460
Gly Lys Ile Gly Ser Tyr Leu Ser Ala Ser Thr Arg His Arg Val Leu
465          470          475          480
Thr Ser Ala Phe Ser Arg Ala Thr Arg Asp Pro Phe Ala Pro Ser Arg
          485          490          495
Val Ala Gly Val Leu Gly Phe Ala Ala Thr His Asn Leu Tyr Ser Met
          500          505          510
Asn Asp Cys Ala Gln Lys Ile Leu Pro Val Leu Cys Gly Leu Thr Val
          515          520          525
Asp Pro Glu Lys Ser Val Arg Asp Gln Ala Phe Lys Ala Ile Arg Ser
          530          535          540
Phe Leu Ser Lys Leu Glu Ser Val Ser Glu Asp Pro Thr Gln Leu Glu
545          550          555          560
Glu Val Glu Lys Asp Val His Ala Ala Ser Ser Pro Gly Met Gly Gly
          565          570          575
Ala Ala Ala Ser Trp Ala Gly Trp Ala Val Thr Gly Val Ser Ser Leu
          580          585          590
Thr Ser Lys Leu Ile Arg Ser His Pro Thr Thr Ala Pro Thr Glu Thr
          595          600          605
Asn Ile Pro Gln Arg Pro Thr Pro Glu Gly Val Pro Ala Pro Ala Pro
          610          615          620
Thr Pro Val Pro Ala Thr Pro Thr Thr Ser Gly His Trp Glu Thr Gln
625          630          635          640
Glu Glu Asp Lys Asp Thr Ala Glu Asp Ser Ser Thr Ala Asp Arg Trp
          645          650          655
Asp Asp Glu Asp Trp Gly Ser Leu Glu Gln Glu Ala Glu Ser Val Leu

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	660		665		670										
Ala	Gln	Gln	Asp	Asp	Trp	Ser	Thr	Gly	Gly	Gln	Val	Ser	Arg	Ala	Ser
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Gln	Val	Ser	Asn	Ser	Asp	His	Lys	Ser	Ser	Lys	Ser	Pro	Glu	Ser	Asp
	690					695						700			
Trp	Ser	Ser	Trp	Glu	Ala	Glu	Gly	Ser	Trp	Glu	Gln	Gly	Trp	Gln	Glu
705				710						715				720	
Pro	Ser	Ser	Gln	Glu	Pro	Pro	Pro	Asp	Gly	Thr	Arg	Leu	Ala	Ser	Glu
			725						730					735	
Tyr	Asn	Trp	Gly	Gly	Pro	Glu	Ser	Ser	Asp	Lys	Gly	Asp	Pro	Phe	Ala
			740						745				750		
Thr	Leu	Ser	Ala	Arg	Pro	Ser	Thr	Gln	Pro	Arg	Pro	Asp	Ser	Trp	Gly
	755						760					765			
Glu	Asp	Asn	Trp	Glu	Gly	Leu	Glu	Thr	Asp	Ser	Arg	Gln	Val	Lys	Ala
	770					775					780				
Glu	Leu	Ala	Arg	Lys	Lys	Arg	Glu	Glu	Arg	Arg	Arg	Glu	Met	Glu	Ala
785					790					795				800	
Lys	Arg	Ala	Glu	Arg	Lys	Val	Ala	Lys	Gly	Pro	Met	Lys	Leu	Gly	Ala
			805						810					815	
Arg	Lys	Leu	Asp												
			820												

&lt;210&gt; 6237

&lt;211&gt; 494

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6237

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 120  
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 180  
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 240  
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 360  
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&lt;210&gt; 6238

&lt;211&gt; 141

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6238

Met Leu Phe Arg Asn Arg Phe Leu Leu Leu Leu Ala Leu Ala Ala Leu

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Leu Ala Phe Val Ser Leu Ser Leu Gln Phe Phe His Leu Ile Pro Val			
	20	25	30
Ser Thr Pro Lys Asn Gly Met Ser Ser Lys Ser Arg Lys Arg Ile Met			
	35	40	45
Pro Asp Pro Val Thr Glu Pro Pro Val Thr Asp Pro Val Tyr Glu Ala			
	50	55	60
Leu Leu Tyr Cys Asn Ile Pro Ser Val Ala Glu Arg Ser Met Glu Gly			
65	70	75	80
His Ala Pro His His Phe Lys Leu Val Ser Val His Val Phe Ile Arg			
	85	90	95
His Gly Asp Arg Tyr Pro Leu Tyr Val Ile Pro Lys Thr Lys Arg Pro			
	100	105	110
Glu Ile Asp Cys Thr Leu Val Ala Asn Arg Lys Pro Tyr His Pro Lys			
	115	120	125
Leu Glu Ala Phe Ile Ser His Met Leu Arg Gly Ser Gly			
	130	135	140

&lt;210&gt; 6239

&lt;211&gt; 911

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6239

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911

<210> 6240

<211> 235

<212> PRT

<213> Homo sapiens

<400> 6240

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          20          25          30
Leu Glu Leu Leu Ser Pro Phe Gln Leu Tyr Phe Asn Pro His Leu Val
          35          40          45
Phe Arg Lys Phe Gln Val Trp Arg Leu Val Thr Asn Phe Leu Phe Phe
          50          55          60
Gly Pro Leu Gly Phe Ser Phe Phe Phe Asn Met Leu Phe Val Phe Arg
65          70          75          80
Tyr Cys Arg Met Leu Glu Glu Gly Ser Phe Arg Gly Arg Thr Ala Asp
          85          90          95
Phe Val Phe Met Phe Leu Phe Gly Gly Val Leu Met Thr Leu Leu Gly
          100         105         110
Leu Leu Gly Ser Leu Phe Phe Leu Gly Gln Ala Leu Met Ala Met Leu
          115         120         125
Val Tyr Val Trp Ser Arg Arg Ser Pro Arg Val Arg Val Asn Phe Phe
          130         135         140
Gly Leu Leu Thr Phe Gln Ala Pro Phe Leu Pro Trp Ala Leu Met Gly
145         150         155         160
Phe Ser Leu Leu Leu Gly Asn Ser Ile Leu Val Asp Leu Leu Gly Ile
          165         170         175
Ala Val Gly His Ile Tyr Tyr Phe Leu Glu Asp Val Phe Pro Asn Gln
          180         185         190
Pro Gly Gly Lys Arg Leu Leu Gln Thr Pro Gly Phe Leu Lys Leu Leu
          195         200         205
Leu Asp Ala Pro Ala Glu Asp Pro Asn Tyr Leu Pro Leu Pro Glu Glu
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Gln Pro Gly Pro His Leu Pro Pro Pro Gln Gln
225         230         235

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<210> 6241

<211> 1515

<212> DNA

<213> Homo sapiens

<400> 6241

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120
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180
ccaccgccgc cgccgccgcc gactcccgcg accccgacgt cctcggcgtc caacctggac
240

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 360  
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 cccggaggct tcggaattgc cccccactgc ctggatgagg gcactgtgcg gagtatggtc  
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&lt;210&gt; 6242

&lt;211&gt; 245

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6242

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 Gly Phe Leu Leu Trp Lys Ala Ile Pro Ser Phe Ala Ser Ser Thr Leu  
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 Glu Glu Glu Val Leu Ile Ile Leu Ser Gly Ser Glu Cys Ser Thr Cys  
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&lt;210&gt; 6245

&lt;211&gt; 6609

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6245

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&lt;210&gt; 6246

&lt;211&gt; 1286

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6246

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Lys	Ile	Ser	His	Gln	Asp	His	Ser	Asp	Lys	Asn	Arg	Leu	Leu	Glu	Leu
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Glu	Thr	Arg	Leu	Arg	Glu	Val	Ser	Leu	Glu	His	Glu	Glu	Gln	Lys	Leu
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Glu	Leu	Lys	Arg	Gln	Leu	Thr	Glu	Leu	Gln	Leu	Ser	Leu	Gln	Glu	Arg

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Glu Ser Gln Leu Thr	Ala Leu Gln Ala Ala Arg	Ala Ala Leu Glu Ser				
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Gln Leu Arg Gln Ala Lys Thr	Glu Leu Glu Glu Thr Thr	Ala Glu Ala				
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Glu Glu Glu Ile Gln Ala Leu Thr	Ala His Arg Asp Glu Ile Gln Arg					
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Asn Phe Tyr Leu Ser Lys Gln Leu Asp Glu Ala Ser Gly Ala Asn Asp						
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Arg Ser Val Leu Gly Asp Glu Lys Ser Gln Phe Glu Cys Arg Val Arg						
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Glu Leu Gln Arg Met Leu Asp Thr Glu Lys Gln Ser Arg Ala Arg Ala						
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Asp Gln Arg Ile Thr Glu Ser Arg Gln Val Val Glu Leu Ala Val Lys						
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Gln Gly Leu Gln Glu Ala Leu Asp Arg Ala Asp Leu Leu Lys Thr Glu						
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His Glu Lys Val Lys Met Glu Gly Thr Ile Ser Gln Gln Thr Lys Leu						
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Ile Asp Phe Leu Gln Ala Lys Met Asp Gln Pro Ala Lys Lys Lys Lys						
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Asp Lys Asn Asp His Ser Leu Ala Pro Ala Val Phe Ala Ala Ser Ser		
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Asn Ser Phe Pro Val Ser Ile Val Gln Val Asn Ser Ala Gly Gln Arg		1040
	1045	1050
Glu Glu Tyr Leu Leu Cys Phe His Glu Phe Gly Val Phe Val Asp Ser		1055
	1060	1065
Tyr Gly Arg Arg Ser Arg Thr Asp Asp Leu Lys Trp Ser Arg Leu Pro		1070
	1075	1080
Leu Ala Phe Ala Tyr Arg Glu Pro Tyr Leu Phe Val Thr His Phe Asn		1085
	1090	1095
Ser Leu Glu Val Ile Glu Ile Gln Ala Arg Ser Ser Ala Gly Thr Pro		1100
1105	1110	1115
Ala Arg Ala Tyr Leu Asp Ile Pro Asn Pro Arg Tyr Leu Gly Pro Ala		1120
	1125	1130
Ile Ser Ser Gly Ala Ile Tyr Leu Ala Ser Ser Tyr Gln Asp Lys Leu		1135
	1140	1145
Arg Val Ile Cys Cys Lys Gly Asn Leu Val Lys Glu Ser Gly Thr Glu		1150
	1155	1160
His His Arg Gly Pro Ser Thr Ser Arg Ser Ser Pro Asn Lys Arg Gly		1165
	1170	1175
Pro Pro Thr Tyr Asn Glu His Ile Thr Lys Arg Val Ala Ser Ser Pro		1180
1185	1190	1195
Ala Pro Pro Glu Gly Pro Ser His Pro Arg Glu Pro Ser Thr Pro His		1200
	1205	1210
Arg Tyr Arg Glu Gly Arg Thr Glu Leu Arg Arg Asp Lys Ser Pro Gly		1215
	1220	1225
Arg Pro Leu Glu Arg Glu Lys Ser Pro Gly Arg Met Leu Ser Thr Arg		1230
	1235	1240
Arg Glu Arg Ser Pro Gly Arg Leu Phe Glu Asp Ser Ser Arg Gly Arg		1245
	1250	1255
Leu Pro Ala Gly Ala Val Arg Thr Pro Leu Ser Gln Val Asn Lys Val		1260
1265	1270	1275
Trp Asp Gln Ser Ser Val		1280
	1285	

&lt;210&gt; 6247

&lt;211&gt; 497

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6247

gcggccgcag cgctgaatgg ggtggaccga cgttccctgc agcggttcaca aggctggctc  
60

tagaagtgcg ggagagggcc aagaggaggg cggtggactg gcatgccctg gagcggtccca  
120

aaggctgcat gggggctcctt gcccgaggagg cgccccacct agagaaacag ccggcagccg  
180

gcccgcagcg cgttctcccg ggagagaaat attattcatc tgtgccagag gaaggagggg  
240

caacccatgt ctatcgttat cacagaggcg agtcgaagct gcacatgtgc ttggacatag  
300

ggaatggtca gagaaaagac agaaaaaaga catcccttgg tcctggaggc agctatcaaa  
360



tatcagagca tgctccagag gcatcccagc ctgtgagtac ggaactgctt acgcactggg  
 420  
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 480  
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 497

<210> 6248

<211> 142

<212> PRT

<213> Homo sapiens

<400> 6248

Met	Gly	Trp	Thr	Asp	Val	Pro	Cys	Ser	Val	His	Lys	Ala	Gly	Ser	Arg
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Ser	Ala	Gly	Glu	Gly	Gln	Glu	Glu	Gly	Gly	Gly	Leu	Ala	Cys	Pro	Gly
		20						25					30		
Ala	Ser	Gln	Arg	Leu	His	Gly	Gly	Pro	Cys	Pro	Gly	Gly	Ala	Pro	Pro
		35					40					45			
Arg	Glu	Thr	Ala	Gly	Ser	Arg	Pro	Ala	Ala	Arg	Ser	Pro	Gly	Arg	Glu
	50					55					60				
Ile	Leu	Phe	Ile	Cys	Ala	Arg	Gly	Arg	Arg	Gly	Asn	Pro	Cys	Leu	Ser
65				70						75				80	
Leu	Ser	Gln	Arg	Arg	Val	Glu	Ala	Ala	His	Val	Leu	Gly	His	Arg	Glu
			85						90					95	
Trp	Ser	Glu	Lys	Arg	Gln	Lys	Lys	Asp	Ile	Pro	Trp	Ser	Trp	Arg	Gln
		100						105					110		
Leu	Ser	Asn	Ile	Arg	Ala	Cys	Ser	Arg	Gly	Ile	Pro	Ala	Cys	Glu	Tyr
		115					120					125			
Gly	Thr	Ala	Tyr	Ala	Leu	Gly	Phe	Thr	Thr	Val	Ala	Thr	Pro		
	130						135					140			

<210> 6249

<211> 1217

<212> DNA

<213> Homo sapiens

<400> 6249

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 120  
 tgaactgcag gtgggaattt ctgagaaggt ttccttctta aatagaaaga ttaaaccaca  
 180  
 ggttccatta tgggtcgact tgatgggaaa gtcacatcc tgacggccgc tgctcagggg  
 240  
 attggccaag cagctgcctt agcttttgca agagaagggtg ccaaagtcac agccacagac  
 300  
 attaattgagt ccaaacttca ggaactggaa aagtacccgg gtattcaaac tcgtgtcctt  
 360  
 gatgtcacia agaagaaaca aattgatcag tttgccaatg aagttgagag acttgatggt  
 420  
 ctctttaatg ttgctggttt tgtccatcat ggaactgtcc tggattgtga ggagaaagac  
 480

tgggacttct cgatgaatct caatgtgcgc agcatgtacc tgatgatcaa ggcattcctt  
 540  
 cctaaaatgc ttgctcagaa atctggcaat attatcaaca tgtcttctgt ggcttccagc  
 600  
 gtcaaaggag ttgtgaacag atgtgtgtac agcacaacca aggcagccgt gattggcctc  
 660  
 acaaaatctg tggtgcaga tttcatccag cagggcatca ggtgcaactg tgtgtgccca  
 720  
 ggaacagttg atacgccatc tctacaagaa agaatacaag ccagaggaaa tcctgaagag  
 780  
 gcacggaatg atttcctgaa gagacaaaag acgggaagat tcgcaactgc agaagaaata  
 840  
 gccatgctct gcgtgtatct ggcttctgat gaatctgctt atgtaactgg taaccctgtc  
 900  
 atcattgatg gaggctggag cttgtgattt taggatctcc atggtgggaa ggaaggcagg  
 960  
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 1020  
 taatcacatg ttaatgaaaa taagctcttt ttaatgatgt cactgtttgc aagagtctga  
 1080  
 ttctttaagt atattaatct ctttgaatc tcttctgaaa tcattgtaaa gaaataaaaa  
 1140  
 tattgaactc atagcaggag aatagttttt aaaataaatc tcgatttggt agcaaaaaaa  
 1200  
 aaaaaaaaaa aaaaaaa  
 1217

&lt;210&gt; 6250

&lt;211&gt; 245

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6250

Met Gly Arg Leu Asp Gly Lys Val Ile Ile Leu Thr Ala Ala Ala Gln  
 1 5 10 15  
 Gly Ile Gly Gln Ala Ala Ala Leu Ala Phe Ala Arg Glu Gly Ala Lys  
 20 25 30  
 Val Ile Ala Thr Asp Ile Asn Glu Ser Lys Leu Gln Glu Leu Glu Lys  
 35 40 45  
 Tyr Pro Gly Ile Gln Thr Arg Val Leu Asp Val Thr Lys Lys Lys Gln  
 50 55 60  
 Ile Asp Gln Phe Ala Asn Glu Val Glu Arg Leu Asp Val Leu Phe Asn  
 65 70 75 80  
 Val Ala Gly Phe Val His His Gly Thr Val Leu Asp Cys Glu Glu Lys  
 85 90 95  
 Asp Trp Asp Phe Ser Met Asn Leu Asn Val Arg Ser Met Tyr Leu Met  
 100 105 110  
 Ile Lys Ala Phe Leu Pro Lys Met Leu Ala Gln Lys Ser Gly Asn Ile  
 115 120 125  
 Ile Asn Met Ser Ser Val Ala Ser Ser Val Lys Gly Val Val Asn Arg  
 130 135 140  
 Cys Val Tyr Ser Thr Thr Lys Ala Ala Val Ile Gly Leu Thr Lys Ser  
 145 150 155 160  
 Val Ala Ala Asp Phe Ile Gln Gln Gly Ile Arg Cys Asn Cys Val Cys

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<400> 6251
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120
ttttgtgact ttttccgttt ctttacaata ggacttctct cagtgtgtga caccagtgga
180
gggctgacct atctctctct cctttgcttc accaggaatg tcatcagaca catggcttga
240
ccttggaagg gccagtgctg tctgacaggg ctttgacagac cgggcggcta ttgctttgaa
300
aaggaggaga aagaccacgc acgggcagca gcctggaggg acccggggg ctgctgagag
360
ggggctccgc tgcgacgggc cctggcccag cttcaggccc tcacaggagg acagtcaagg
420
gctgggagcc ctaggccgga ctgcatttcc gctcccgag gagactttct atgaaataaa
480
tatagaaaag agggcatccc ccagcccac agcacaagac cctggccctc agcgtggac
540
agctgagaca gacgcaggct cgctgctcag ggggagtaag tgctgggctc cagtaggctc
600
ccacaggccc actgaggcag aggcattgag cgcccaagtg ctggatgggg catggggaga
660
aaggggcgtg ggcagccctg ctactgctgg caagaggtgg cccattttt tccagatggg
720
gaaactgagg cacaaggagg tttgggaact tgcccaaggt cactcacagt gagtcagctt
780
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840
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900
tgaggacata tggggggtag gcctctgggg aagggtcttt gcttggcatc aggcagggcc
960
aagtccagta agggcaaggg gagggggcat tctggtgaga acagcatttc tggcaagacg
1020
ggcatccact tcaaaatctc ggctcaaaag ggcagcaggg ctgttctcaa gccaggcagg
1080

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caggggtcccc caatccctac aattctcctg agtccctcac caccatggag gacccttgct  
 1140  
 aggggtctacc gggagagtca ccacatctat tatgaggcaa gggcactggg atatgttccc  
 1200  
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 1260  
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 1380  
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<210> 6252

<211> 100

<212> PRT

<213> Homo sapiens

<400> 6252

Met	Gly	Gly	Arg	Pro	Leu	Gly	Lys	Gly	Leu	Cys	Leu	Ala	Ser	Gly	Arg
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Ala	Lys	Ser	Ser	Lys	Gly	Lys	Gly	Arg	Gly	His	Ser	Gly	Glu	Asn	Ser
			20					25				30			
Ile	Ser	Gly	Lys	Thr	Gly	Ile	His	Phe	Lys	Ile	Ser	Ala	Gln	Lys	Gly
			35				40					45			
Ser	Arg	Ala	Val	Leu	Lys	Pro	Gly	Arg	Gln	Gly	Pro	Pro	Ile	Pro	Thr
	50					55					60				
Ile	Leu	Leu	Ser	Pro	Ser	Pro	Pro	Trp	Arg	Thr	Leu	Ala	Arg	Val	Tyr
65				70					75				80		
Arg	Glu	Ser	His	His	Ile	Tyr	Tyr	Glu	Ala	Arg	Ala	Leu	Gly	Tyr	Val
			85					90					95		
Pro	Thr	Ile	Pro												
			100												

<210> 6253

<211> 1953

<212> DNA

<213> Homo sapiens

<400> 6253

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 120  
 tctagccagc tccgaatcct gatccaggcg ggggccaggg gccctcgc tcccctctga  
 180  
 ggaccgaaga tgagcttccct cttcagcagc cgctcttcta aaacattcaa accaaagaag  
 240

aatatccctg aaggatctca tcagtatgaa ctcttaaaac atgcagaagc aactctagga  
300  
agtgggaatc tgagacaagc tgttatgttg cctgagggag aggatctcaa tgaatggatt  
360  
gctgtgaaca ctgtggattt ctttaaccag atcaacatgt tatatggaac tattacagaa  
420  
ttctgcactg aagcaagctg tccagtcatg tctgcaggtc cgagatatga atatcactgg  
480  
gcagatggta ctaatattaa aaagccaatc aaatgttctg caccaaaata cattgactat  
540  
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600  
gtcccatctt ccaaaaactt tatgtctgtg gcaaagacta ttctaaagcg tctgttcagg  
660  
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720  
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780  
aggcgtgagc tggcacctct tcaagaatta atagagaaac ttggatcaaa agacagataa  
840  
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900  
ctatctgtta tagactagt atacaaactt taagaaaaca ggataaaaag ataccattg  
960  
cctgtgtcta ctgataaaat tatcccaaag gtaggttggt gtgatagttt ccgagtaaga  
1020  
ccttaaggac acagccaaat cttaagtact gtgtgaccac tcttggtgtt atcacatagt  
1080  
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1140  
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1200  
cacaatggac attaagaatt tccatcaata atttatgaat aagtttccag aacaaatttc  
1260  
ctaataacac aatcagattg gttttattct ttatttttac gaataaaaaa tgtatttttc  
1320  
agtacccttg agatttagaa catctgtgtc acttcagata acattttagt ttcaagtttg  
1380  
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1440  
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1500  
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1560  
gaagtaattt tttaatgtct tctaaggatg gtcttcagg cttttaaact gaaaagctta  
1620  
attcagatag tagcttttgg ctgagaaaag gaatccaaaa tattaataaa tttagatctc  
1680  
aaaaccacta tttttattat ttcattattt ttcagaggcc ttaaaattct gggtaagaga  
1740  
atggaggaaa atactcagag tacttgatta ttttatttcc ttttattaaa aaattacttc  
1800  
tatgttttta ttgtctcttg agccttagtt aagagtagtg tagaaatgca tgaacttcac  
1860

cctaataagg ataaaactta aggaaaacca caataaacca tgaagggtgta cacatcttaa  
1920

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa  
1953

<210> 6254

<211> 216

<212> PRT

<213> Homo sapiens

<400> 6254

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Lys Asn Ile Pro Glu Gly Ser His Gln Tyr Glu Leu Leu Lys His Ala
      20           25           30
Glu Ala Thr Leu Gly Ser Gly Asn Leu Arg Gln Ala Val Met Leu Pro
      35           40           45
Glu Gly Glu Asp Leu Asn Glu Trp Ile Ala Val Asn Thr Val Asp Phe
      50           55           60
Phe Asn Gln Ile Asn Met Leu Tyr Gly Thr Ile Thr Glu Phe Cys Thr
      65           70           75           80
Glu Ala Ser Cys Pro Val Met Ser Ala Gly Pro Arg Tyr Glu Tyr His
      85           90           95
Trp Ala Asp Gly Thr Asn Ile Lys Lys Pro Ile Lys Cys Ser Ala Pro
      100          105          110
Lys Tyr Ile Asp Tyr Leu Met Thr Trp Val Gln Asp Gln Leu Asp Asp
      115          120          125
Glu Thr Leu Phe Pro Ser Lys Ile Gly Val Pro Phe Pro Lys Asn Phe
      130          135          140
Met Ser Val Ala Lys Thr Ile Leu Lys Arg Leu Phe Arg Val Tyr Ala
      145          150          155          160
His Ile Tyr His Gln His Phe Asp Ser Val Met Gln Leu Gln Glu Glu
      165          170          175
Ala His Leu Asn Thr Ser Phe Lys His Phe Ile Phe Phe Val Gln Glu
      180          185          190
Phe Asn Leu Ile Asp Arg Arg Glu Leu Ala Pro Leu Gln Glu Leu Ile
      195          200          205
Glu Lys Leu Gly Ser Lys Asp Arg
      210          215
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<210> 6255

<211> 622

<212> DNA

<213> Homo sapiens

<400> 6255

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  120
aaagccacag tggctgcctt cacagccagc gagggccacg cacatcccag ggtagtggag
  180
ctacccaaga cggatgaggg cctaggcttc aacatcatgg gtggcaaaga gcaaaactcg
  240
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cccatctaca tctcccgggt catcccaggg ggtgtggctg accgccatgg aggcctcaag  
 300  
 cgtggggatc aactgttgtc ggtgaacggg gtgagcggtg aggggtgagca gcatgagaag  
 360  
 gcgggtggagc tgctgaaggc ggcccagggc tcggtgaagc tggttgtccg ttacacaccg  
 420  
 cgagtgtctg aggagatgga ggcccgggtc gagaagatgc gctctgcccg ccggcgccaa  
 480  
 cagcatcaga gctactcgtc cttggagtct cgaggttgaa accacagatc tggacgttca  
 540  
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 600  
 ccctcaaaaa aaaaaaaaaa aa  
 622

<210> 6256

<211> 150

<212> PRT

<213> Homo sapiens

<400> 6256

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Lys	Lys	Lys	Ala	Thr	Val	Ala	Ala	Phe	Thr	Ala	Ser	Glu	Gly	His	Ala
			20					25					30		
His	Pro	Arg	Val	Val	Glu	Leu	Pro	Lys	Thr	Asp	Glu	Gly	Leu	Gly	Phe
			35					40					45		
Asn	Ile	Met	Gly	Gly	Lys	Glu	Gln	Asn	Ser	Pro	Ile	Tyr	Ile	Ser	Arg
			50					55				60			
Val	Ile	Pro	Gly	Gly	Val	Ala	Asp	Arg	His	Gly	Gly	Leu	Lys	Arg	Gly
					70					75				80	
Asp	Gln	Leu	Leu	Ser	Val	Asn	Gly	Val	Ser	Val	Glu	Gly	Glu	Gln	His
				85					90					95	
Glu	Lys	Ala	Val	Glu	Leu	Leu	Lys	Ala	Ala	Gln	Gly	Ser	Val	Lys	Leu
			100					105					110		
Val	Val	Arg	Tyr	Thr	Pro	Arg	Val	Leu	Glu	Glu	Met	Glu	Ala	Arg	Phe
			115					120					125		
Glu	Lys	Met	Arg	Ser	Ala	Arg	Arg	Arg	Gln	Gln	His	Gln	Ser	Tyr	Ser
			130				135					140			
Ser	Leu	Glu	Ser	Arg	Gly										
145							150								

<210> 6257

<211> 2216

<212> DNA

<213> Homo sapiens

<400> 6257

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 180

ttgtcccttt gcgggagtcg ctggtctctt ctgttgtggg gaagaaggaa ggtgggaggg  
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gcactgtcca ccagcactca gagctccatt atgtccccag ctgggggttc agggtagggg  
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ggactggggg tgtccccag cctcagcaga cggagggcct cagggatgag gctgccagga  
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480  
gccatgttct cctcagacag aaactgcttg cgcagaggct cctgctctc ctccaggcgc  
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600  
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960  
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1020  
cgtcgcgcgc ggagcactct gggacttgta gttctggaga tggagcgagc tgtgccgctc  
1080  
gcggtgcctc tgggtcagac agagggtgtc caggccttgc agcggctcca tatgaccatc  
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1200  
attgccatct tcagcttgtc ctctgctttg agctcagaag ccaaagagga aagtaagaag  
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1380  
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1560  
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1740  
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1800



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 1860  
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 1980  
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<210> 6258

<211> 340

<212> PRT

<213> Homo sapiens

<400> 6258

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			20					25					30		
Ser	Pro	Cys	Gly	Lys	Phe	Leu	Ala	Ala	Gly	Asn	Asn	Tyr	Gly	Gln	Ile
		35					40					45			
Ala	Ile	Phe	Ser	Leu	Ser	Ser	Ala	Leu	Ser	Ser	Glu	Ala	Lys	Glu	Glu
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Ser	Lys	Lys	Pro	Val	Val	Thr	Phe	Gln	Ala	His	Asp	Gly	Pro	Val	Tyr
65					70				75					80	
Ser	Met	Val	Ser	Thr	Asp	Arg	His	Leu	Leu	Ser	Ala	Gly	Asp	Gly	Glu
				85					90					95	
Val	Lys	Ala	Trp	Leu	Trp	Ala	Glu	Met	Leu	Lys	Lys	Gly	Cys	Lys	Glu
		100					105					110			
Leu	Trp	Arg	Arg	Gln	Pro	Pro	Tyr	Arg	Thr	Ser	Leu	Glu	Val	Pro	Glu
		115				120						125			
Ile	Asn	Ala	Leu	Leu	Leu	Val	Pro	Lys	Glu	Asn	Ser	Leu	Ile	Leu	Ala
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Gly	Gly	Asp	Cys	Gln	Leu	His	Thr	Met	Asp	Leu	Glu	Thr	Gly	Thr	Phe
145				150					155					160	
Thr	Arg	Val	Leu	Arg	Gly	His	Thr	Asp	Tyr	Ile	His	Cys	Leu	Ala	Leu
			165					170					175		
Arg	Glu	Arg	Ser	Pro	Glu	Val	Leu	Ser	Gly	Gly	Glu	Asp	Gly	Ala	Val
		180					185					190			
Arg	Leu	Trp	Asp	Leu	Arg	Thr	Ala	Lys	Glu	Val	Gln	Thr	Ile	Glu	Ser
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Ile	Ser	Thr	Arg	Ser	Ala	Arg	Gly	Pro	Thr	Met	Gly	Ala	Gly	Leu	Asp
	210					215					220				
Val	Trp	Thr	Asp	Ser	Asp	Trp	Met	Val	Cys	Gly	Gly	Gly	Pro	Ala	Leu
225				230					235					240	
Thr	Leu	Trp	His	Leu	Arg	Ser	Ser	Thr	Pro	Thr	Thr	Ile	Phe	Pro	Ile
			245					250				255			
Arg	Ala	Pro	Gln	Lys	His	Val	Thr	Phe	Tyr	Gln	Asp	Leu	Ile	Leu	Ser

260 265 270  
 Ala Gly Gln Gly Arg Cys Val Asn Gln Trp Gln Leu Ser Gly Glu Leu  
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 Lys Ala Gln Val Pro Gly Ser Ser Pro Gly Leu Leu Ser Leu Ser Leu  
 290 295 300  
 Asn Gln Gln Pro Ala Ala Pro Glu Cys Lys Val Leu Thr Ala Ala Gly  
 305 310 315 320  
 Asn Ser Cys Arg Val Asp Val Phe Thr Asn Leu Gly Tyr Arg Ala Phe  
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 Ser Leu Ser Phe  
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<210> 6259

<211> 384

<212> DNA

<213> Homo sapiens

<400> 6259

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 180  
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 240  
 cagggttaatt ccttctctga tctgaaggca tctactcttg ttcacaaacc ccagtcagat  
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<210> 6260

<211> 128

<212> PRT

<213> Homo sapiens

<400> 6260

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 20 25 30  
 Gln Lys Asn Glu Lys Ile Lys Tyr Ser Arg Phe Ala Ala Thr Asn Thr  
 35 40 45  
 Arg Val Lys Ala Lys Gln Lys Pro Leu Ile Ser Asn Ser His Thr Asp  
 50 55 60  
 His Leu Met Gly Cys Thr Lys Ser Ala Glu Pro Gly Thr Glu Thr Ser  
 65 70 75 80  
 Gln Val Asn Ser Phe Ser Asp Leu Lys Ala Ser Thr Leu Val His Lys  
 85 90 95  
 Pro Gln Ser Asp Phe Thr Asn Asp Ala Leu Ser Pro Lys Phe Asn Leu  
 100 105 110  
 Ser Ser Ser Ile Ser Ser Glu Asn Ser Leu Ile Lys Gly Gly Ala Ala

115

120

125

&lt;210&gt; 6261

&lt;211&gt; 3619

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6261

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120  
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300  
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<210> 6262

<211> 431

<212> PRT

<213> Homo sapiens

<400> 6262

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			20					25					30		
Val	Arg	Leu	Gln	Asn	Glu	Thr	Ser	Tyr	Ser	Arg	Val	Leu	His	Gly	Tyr
		35					40					45			
Ala	Ala	Gln	Gln	Leu	Pro	Ser	Leu	Leu	Lys	Glu	Arg	Glu	Phe	His	Leu
	50					55					60				
Gly	Thr	Leu	Asn	Lys	Val	Phe	Ala	Ser	Gln	Trp	Leu	Asn	His	Arg	Gln
65				70						75				80	
Val	Val	Cys	Gly	Thr	Lys	Cys	Asn	Thr	Leu	Phe	Val	Val	Asp	Val	Gln
			85					90					95		
Thr	Ser	Gln	Ile	Thr	Lys	Ile	Pro	Ile	Leu	Lys	Asp	Arg	Glu	Pro	Gly
		100					105					110			
Gly	Val	Thr	Gln	Gln	Gly	Cys	Gly	Ile	His	Ala	Ile	Glu	Leu	Asn	Pro
		115				120						125			
Ser	Arg	Thr	Leu	Leu	Ala	Thr	Gly	Gly	Asp	Asn	Pro	Asn	Ser	Leu	Ala
	130					135					140				
Ile	Tyr	Arg	Leu	Pro	Thr	Leu	Asp	Pro	Val	Cys	Val	Gly	Asp	Asp	Gly
145			150						155					160	
His	Lys	Asp	Trp	Ile	Phe	Ser	Ile	Ala	Trp	Ile	Ser	Asp	Thr	Met	Ala
		165					170						175		
Val	Ser	Gly	Ser	Arg	Asp	Gly	Ser	Met	Gly	Leu	Trp	Glu	Val	Thr	Asp
		180					185					190			
Asp	Val	Leu	Thr	Lys	Ser	Asp	Ala	Arg	His	Asn	Val	Ser	Arg	Val	Pro

195	200	205
Val Tyr Ala His Ile Thr His Lys Ala Leu Lys Asp Ile Pro Lys Glu		
210	215	220
Asp Thr Asn Pro Asp Asn Cys Lys Val Arg Ala Leu Ala Phe Asn Asn		
225	230	235
Lys Asn Lys Glu Leu Gly Ala Val Ser Leu Asp Gly Tyr Phe His Leu		
245	250	255
Trp Lys Ala Glu Asn Thr Leu Ser Lys Leu Leu Ser Thr Lys Leu Pro		
260	265	270
Tyr Cys Arg Glu Asn Val Cys Leu Ala Tyr Gly Ser Glu Trp Ser Val		
275	280	285
Tyr Ala Val Gly Ser Gln Ala His Val Ser Phe Leu Asp Pro Arg Gln		
290	295	300
Pro Ser Tyr Asn Val Lys Ser Val Cys Ser Arg Glu Arg Gly Ser Gly		
305	310	315
Ile Arg Ser Val Ser Phe Tyr Glu His Ile Ile Thr Val Gly Thr Gly		
325	330	335
Gln Gly Ser Leu Leu Phe Tyr Asp Ile Arg Ala Gln Arg Phe Leu Glu		
340	345	350
Glu Arg Leu Ser Ala Cys Tyr Gly Ser Lys Pro Arg Leu Ala Gly Glu		
355	360	365
Asn Leu Lys Leu Thr Thr Gly Lys Gly Trp Leu Asn His Asp Glu Thr		
370	375	380
Trp Arg Asn Tyr Phe Ser Asp Ile Asp Phe Phe Pro Asn Ala Val Tyr		
385	390	395
Thr His Cys Tyr Asp Ser Ser Gly Thr Lys Leu Phe Val Ala Gly Gly		
405	410	415
Pro Leu Pro Ser Gly Leu His Gly Asn Tyr Ala Gly Leu Trp Ser		
420	425	430

&lt;210&gt; 6263

&lt;211&gt; 2508

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6263

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 240  
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<210> 6264

<211> 654

<212> PRT

<213> Homo sapiens

<400> 6264

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Cys	Thr	Gly	Ile	Glu	Asn	Ile	Asp	Glu	Ala	Ile	Thr	Leu	Leu	Glu	Gln
			20					25				30			
Asn	Asn	Trp	Asp	Leu	Val	Ala	Ala	Ile	Asn	Gly	Val	Ile	Pro	Gln	Glu
		35				40					45				
Asn	Gly	Ile	Leu	Gln	Ser	Glu	Tyr	Gly	Gly	Glu	Thr	Ile	Pro	Gly	Pro
	50					55				60					
Ala	Phe	Asn	Pro	Ala	Ser	His	Pro	Ala	Ser	Ala	Pro	Thr	Ser	Ser	Ser
65				70				75					80		
Ser	Ser	Ala	Phe	Arg	Pro	Val	Met	Pro	Ser	Arg	Gln	Ile	Val	Glu	Arg
			85					90					95		
Gln	Pro	Arg	Met	Leu	Asp	Phe	Arg	Val	Glu	Tyr	Arg	Asp	Arg	Asn	Val
			100					105				110			
Asp	Val	Val	Leu	Glu	Asp	Thr	Cys	Thr	Val	Gly	Glu	Ile	Lys	Gln	Ile
		115					120				125				
Leu	Glu	Asn	Glu	Leu	Gln	Ile	Pro	Val	Ser	Lys	Met	Leu	Leu	Lys	Gly
	130					135				140					
Trp	Lys	Thr	Gly	Asp	Val	Glu	Asp	Ser	Thr	Val	Leu	Lys	Ser	Leu	His
145				150				155					160		
Leu	Pro	Lys	Asn	Asn	Ser	Leu	Tyr	Val	Leu	Thr	Pro	Asp	Leu	Pro	Pro
			165					170					175		
Pro	Ser	Ser	Ser	Ser	His	Ala	Gly	Ala	Leu	Gln	Glu	Ser	Leu	Asn	Gln
			180					185					190		
Asn	Phe	Met	Leu	Ile	Ile	Thr	His	Arg	Glu	Val	Gln	Arg	Glu	Tyr	Asn
		195					200					205			
Leu	Asn	Phe	Ser	Gly	Ser	Ser	Thr	Ile	Gln	Glu	Val	Lys	Arg	Asn	Val
	210					215				220					
Tyr	Asp	Leu	Thr	Ser	Ile	Pro	Val	Arg	His	Gln	Leu	Trp	Glu	Gly	Trp
225				230				235					240		
Pro	Thr	Ser	Ala	Thr	Asp	Asp	Ser	Met	Cys	Leu	Ala	Glu	Ser	Gly	Leu
			245					250					255		
Ser	Tyr	Pro	Cys	His	Arg	Leu	Thr	Val	Gly	Arg	Arg	Ser	Ser	Pro	Ala
			260					265					270		
Gln	Thr	Arg	Glu	Gln	Ser	Glu	Glu	Gln	Ile	Thr	Asp	Val	His	Met	Val



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Ser Asp Ser Asp Gly Asp Asp Phe Glu Asp Ala Thr Glu Phe Gly Val
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Asp Asp Gly Glu Val Phe Gly Met Ala Ser Ser Ala Leu Arg Lys Ser
305      310      315      320
Pro Met Ile Cys Phe Leu Val Pro Glu Asn Ala Glu Asn Glu Gly Asp
      325      330      335
Ala Leu Leu Gln Phe Thr Ala Glu Phe Ser Ser Arg Tyr Gly Asp Cys
      340      345      350
His Pro Val Phe Phe Ile Gly Ser Leu Glu Ala Ala Phe Gln Glu Ala
      355      360      365
Phe Tyr Val Lys Ala Arg Asp Arg Lys Leu Leu Ala Ile Tyr Leu His
      370      375      380
His Asp Glu Ser Val Leu Thr Asn Val Phe Cys Ser Gln Met Leu Cys
385      390      395      400
Ala Glu Ser Ile Val Ser Tyr Leu Ser Gln Asn Phe Ile Thr Trp Ala
      405      410      415
Trp Asp Leu Thr Lys Asp Ser Asn Arg Ala Arg Phe Leu Thr Met Cys
      420      425      430
Asn Arg His Phe Gly Ser Val Val Ala Gln Thr Ile Arg Thr Gln Lys
      435      440      445
Thr Asp Gln Phe Pro Leu Phe Leu Ile Ile Met Gly Lys Arg Ser Ser
      450      455      460
Asn Glu Val Leu Asn Val Ile Gln Gly Asn Thr Thr Val Asp Glu Leu
465      470      475      480
Met Met Arg Leu Met Ala Ala Met Glu Ile Phe Thr Ala Gln Gln Gln
      485      490      495
Glu Asp Ile Lys Asp Glu Asp Glu Arg Glu Ala Arg Glu Asn Val Lys
      500      505      510
Arg Glu Gln Asp Glu Ala Tyr Arg Leu Ser Leu Glu Ala Asp Arg Ala
      515      520      525
Lys Arg Glu Ala His Glu Arg Glu Met Ala Glu Gln Phe Arg Leu Glu
      530      535      540
Gln Ile Arg Lys Glu Gln Glu Glu Arg Glu Ala Ile Arg Leu Ser
545      550      555      560
Leu Glu Gln Ala Leu Pro Pro Glu Pro Lys Glu Glu Asn Ala Glu Pro
      565      570      575
Val Ser Lys Leu Arg Ile Arg Thr Pro Ser Gly Glu Phe Leu Glu Arg
      580      585      590
Arg Phe Leu Ala Ser Asn Lys Leu Gln Ile Val Phe Asp Phe Val Ala
      595      600      605
Ser Lys Gly Phe Pro Trp Asp Glu Tyr Lys Leu Leu Ser Thr Phe Pro
      610      615      620
Arg Arg Asp Val Thr Gln Leu Asp Pro Asn Lys Ser Leu Leu Glu Val
625      630      635      640
Lys Leu Phe Pro Gln Glu Thr Leu Phe Leu Glu Ala Lys Glu
      645      650

```

&lt;210&gt; 6265

&lt;211&gt; 1344

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6265

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120  
tctgtggagg aagagatgca aagtacagtt cgagagcaca gagatggagg tcatgcaggt  
180  
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240  
gaaagataca ctcaccggag aaaagaagtt tctgaagaaa accacaacca tgccaatgaa  
300  
cgaatgctat ttcattgggtc tccttttgtg aatgcaatta tccacaaagg ctttgatgaa  
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420  
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480  
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1200  
gtttacaaaa ttttttcata tgtattgttc atctatactt catcttacat cgtcatgatt  
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1320  
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1344

&lt;210&gt; 6266

&lt;211&gt; 240

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6266

Xaa Ala Leu Pro Ala Ser His Arg Pro Gly Gln Gln Gly Leu Asn Pro

1	5	10	15
Tyr Leu Thr	Leu Asn Thr Ser Gly	Ser Gly Thr Ile Leu	Ile Asp Leu
	20	25	30
Ser Pro Asp	Asp Lys Glu Phe Gln Ser Val Glu	Glu Glu Met Gln Ser	
	35	40	45
Thr Val Arg	Glu His Arg Asp Gly Gly His Ala	Gly Gly Ile Phe Asn	
	50	55	60
Arg Tyr Asn	Ile Leu Lys Ile Gln Lys Val Cys Asn	Lys Lys Leu Trp	
	65	70	75
Glu Arg Tyr	Thr His Arg Arg Lys Glu Val Ser	Glu Glu Asn His Asn	
	85	90	95
His Ala Asn	Glu Arg Met Leu Phe His Gly Ser	Pro Phe Val Asn Ala	
	100	105	110
Ile Ile His	Lys Gly Phe Asp Glu Arg His Ala Tyr	Ile Gly Gly Met	
	115	120	125
Phe Gly Ala	Gly Ile Tyr Phe Ala Glu Asn Ser	Ser Lys Ser Asn Gln	
	130	135	140
Tyr Val Tyr	Gly Ile Gly Gly Gly Thr Gly Cys Pro	Val His Lys Asp	
	145	150	155
Arg Ser Cys	Tyr Ile Cys His Arg Gln Leu Leu	Phe Cys Arg Val Thr	
	165	170	175
Leu Gly Lys	Ser Phe Leu Gln Phe Ser Ala Met	Lys Met Ala His Ser	
	180	185	190
Pro Pro Gly	His His Ser Val Thr Gly Arg Pro	Ser Val Asn Gly Leu	
	195	200	205
Ala Leu Ala	Glu Tyr Val Ile Tyr Arg Gly Glu	Gln Ala Tyr Pro Glu	
	210	215	220
Tyr Leu Ile	Thr Tyr Gln Ile Met Arg Pro Glu	Gly Met Val Asp Gly	
	225	230	235
			240

&lt;210&gt; 6267

&lt;211&gt; 328

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6267

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60

gggagagggg agggctaagc agagtgggga tgcccggcag tgaccagcc tctctcccca  
120

gatgagcctt tctgcagtt ccgaaggaac gtgttcttcc caaagcggcg ggagctccag  
180

atccatgacg aggaggtcct gcggctgctc tatgaggagg ccaagggcaa cgtgctggct  
240

gcacggtacc cgtgcgacgt ggaggactgc gaggctctgg gcgccctggt gtgccgcgtg  
300

cagcttgggc cctaccagcc cggccggc.

328

&lt;210&gt; 6268

&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6268

Ala Glu Trp Gly Cys Pro Ala Val Thr Gln Pro Leu Ser Pro Asp Glu  
 1 5 10 15  
 Pro Phe Leu Gln Phe Arg Arg Asn Val Phe Phe Pro Lys Arg Arg Glu  
 20 25 30  
 Leu Gln Ile His Asp Glu Glu Val Leu Arg Leu Leu Tyr Glu Glu Ala  
 35 40 45  
 Lys Gly Asn Val Leu Ala Ala Arg Tyr Pro Cys Asp Val Glu Asp Cys  
 50 55 60  
 Glu Ala Leu Gly Ala Leu Val Cys Arg Val Gln Leu Gly Pro Tyr Gln  
 65 70 75 80  
 Pro Gly Arg

&lt;210&gt; 6269

&lt;211&gt; 923

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6269

nggcggaaga tggcgacgcc cctcgggtgg tcgaaggcgg ggtcaggatc tgtgtgtctc  
 60  
 gcttttagatc aactgcggga cgtgattgag tctcaggagg aactaatcca ccagctgagg  
 120  
 aacgtgatgg ttctccagga cgaaaatttt gtcagtaaag aagagttcca ggcagtggag  
 180  
 aagaagctgg tggaagagaa agctgcccat gccaaaacca aggtcctcct ggccaaggaa  
 240  
 gaggagaagt tacagtttgc cctcggagag gtagagggtgc tatccaagca gctggagaaa  
 300  
 gagaagctgg cctttgaaaa agcgtctctc agtgtcaaga gcaaagtcct tcaggagtcc  
 360  
 agcaagaagg accagctcat caccaagtgc aatgagattg agtctcacat tataaagcaa  
 420  
 gaagatatac ttaatggcaa agagaatgag attaaagagt tgcagcaagt tatcagccag  
 480  
 cagaaacaga tcttcagccc accaccagcc ggctccgttg caggaatcac atgtctgact  
 540  
 tccggatcca gaagcagcag gaaagctaca tggcccagggt gctggaccag aagcataaga  
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 aagcctcagg gacacgtcag gccgcagcc accagcatcc cagggaaaaa taaaatggcc  
 660  
 gccgctttcc tgttctctgg ctgtaatccc cagcctctgc cttctctgct ctgggagtcc  
 720  
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 780  
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 900  
 actcccagtg tcctggtaaa ttt  
 923

&lt;210&gt; 6270

&lt;211&gt; 307

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6270

```

Xaa Arg Lys Met Ala Thr Pro Leu Gly Trp Ser Lys Ala Gly Ser Gly
 1           5           10           15
Ser Val Cys Leu Ala Leu Asp Gln Leu Arg Asp Val Ile Glu Ser Gln
 20           25           30
Glu Glu Leu Ile His Gln Leu Arg Asn Val Met Val Leu Gln Asp Glu
 35           40           45
Asn Phe Val Ser Lys Glu Glu Phe Gln Ala Val Glu Lys Lys Leu Val
 50           55           60
Glu Glu Lys Ala Ala His Ala Lys Thr Lys Val Leu Leu Ala Lys Glu
 65           70           75           80
Glu Glu Lys Leu Gln Phe Ala Leu Gly Glu Val Glu Val Leu Ser Lys
 85           90           95
Gln Leu Glu Lys Glu Lys Leu Ala Phe Glu Lys Ala Leu Ser Ser Val
100           105           110
Lys Ser Lys Val Leu Gln Glu Ser Ser Lys Lys Asp Gln Leu Ile Thr
115           120           125
Lys Cys Asn Glu Ile Glu Ser His Ile Ile Lys Gln Glu Asp Ile Leu
130           135           140
Asn Gly Lys Glu Asn Glu Ile Lys Glu Leu Gln Gln Val Ile Ser Gln
145           150           155           160
Gln Lys Gln Ile Phe Ser Pro Pro Pro Ala Gly Ser Val Ala Gly Ile
165           170           175
Thr Cys Leu Thr Ser Gly Ser Arg Ser Ser Arg Lys Ala Thr Trp Pro
180           185           190
Arg Cys Trp Thr Arg Ser Ile Arg Lys Pro Gln Gly His Val Arg Pro
195           200           205
Ala Ala Thr Ser Ile Pro Gly Lys Asn Lys Met Ala Ala Ala Phe Leu
210           215           220
Phe Ser Gly Cys Asn Pro Gln Pro Leu Pro Ser Leu Leu Trp Glu Ser
225           230           235           240
Pro Ala Ser Ser Pro Cys Tyr Phe Pro Pro Ser Trp Ile Val Val Gly
245           250           255
Val His Lys Val Gly Ala Cys Ser Leu Gly Glu Glu Leu Gly Leu Cys
260           265           270
Cys Leu Val Gly Thr Thr Ala Ser Phe Gly Tyr Leu Ile Pro Ser Tyr
275           280           285
Ile Asn Ser Pro Gly Tyr Pro Val Ile Phe His Pro Thr Pro Ser Val
290           295           300
Leu Val Asn
305

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&lt;210&gt; 6271

&lt;211&gt; 1437

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6271

```

nccatggcga cgggcggccca gcagaaggag aacacgctgc ttcacctctt cgccggcggg
60

```

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120  
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180  
agtggagctg gaatggtgag accaacatcc gtgacacctg gactctttca ggttctgaag  
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720  
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1437

&lt;210&gt; 6272

&lt;211&gt; 296

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6272

Xaa Met Ala Thr Gly Gly Gln Gln Lys Glu Asn Thr Leu Leu His Leu

1	5	10	15
Phe	Ala	Gly	Gly
20	25	30	
Leu	Glu	Val	Ile
35	40	45	
Thr	Val	Tyr	Tyr
50	55	60	
Met	Val	Arg	Pro
65	70	75	
Ala	Val	Tyr	Phe
85	90	95	
Ile	Phe	Val	Pro
100	105	110	
Ala	Ala	Phe	Ile
115	120	125	
Thr	Arg	Met	Gln
130	135	140	
Thr	Leu	Gln	Cys
145	150	155	
Phe	Tyr	Arg	Gly
165	170	175	
Ile	Cys	Phe	Ala
180	185	190	
Pro	Leu	Ala	Ser
195	200	205	
Phe	Gly	Leu	Met
210	215	220	
Ile	Ala	Tyr	Pro
225	230	235	
Thr	Lys	Tyr	Lys
245	250	255	
Glu	Gly	Tyr	Leu
260	265	270	
Gln	Ile	Pro	Asn
275	280	285	
Tyr	Leu	Glu	Asp
290	295		

&lt;210&gt; 6273

&lt;211&gt; 2355

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6273

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ccccagacat gccggtgttc acagagcaga tgatccagca ggagcagctg gactcgggtga  
120

tggactggct caccaaccag ccgcggccgg cagctggtgg acaaggacag caccttcctc  
180

agcacgctgg agcaccacct gagccgctac ctgaaggacg tgaagcagca ccacgtcaag  
240

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1920



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 2355

<210> 6274

<211> 70

<212> PRT

<213> Homo sapiens

<400> 6274

Asp	Pro	Glu	Phe	Val	Phe	Tyr	Asp	Gln	Leu	Lys	Gln	Val	Met	Asn	Ala
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Tyr	Arg	Val	Lys	Pro	Ala	Val	Phe	Asp	Leu	Leu	Leu	Ala	Val	Gly	Ile
		20					25				30				
Ala	Ala	Tyr	Leu	Gly	Met	Ala	Tyr	Val	Ala	Val	Gln	Val	Ser	Ser	Ala
		35				40					45				
Gln	Ala	Gln	His	Phe	Ser	Leu	Leu	Tyr	Lys	Thr	Val	Gln	Arg	Leu	Leu
	50					55					60				
Val	Lys	Ala	Lys	Thr	Gln										
65					70										

<210> 6275

<211> 1534

<212> DNA

<213> Homo sapiens

<400> 6275

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 180  
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 240  
 gccgagcggc gcagctttgc gggcccgacc ggctccgcgt ggcaggtgaa gtgcaccggt  
 300  
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 360  
 caaaatttga caaacaggga aacgttactt cttttgaaag gaagaaaact gaattatacc  
 420

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 480  
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 600  
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 660  
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 720  
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 840  
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 900  
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 1534

&lt;210&gt; 6276

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6276

Met	Gly	Val	Thr	His	Lys	Ser	Leu	Xaa	Lys	Ser	Ser	Ala	Gly	Ile	Asp
1				5					10					15	
His	Ala	Glu	Glu	Met	Glu	Leu	Leu	Leu	Glu	Asn	Tyr	Tyr	Arg	Leu	Ala
		20						25					30		
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		35					40					45			
Ser	Gln	Ser	Ile	Ile	Phe	Ile	Asn	Leu	Asp	Ser	His	Arg	Asn	Val	Met
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Ile	Arg	Leu	Asn	Leu	Gln	Leu	Thr	Met	Gly	Thr	Phe	Ser	Leu	Ser	Leu

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Gly Ser Gly Leu Ile Trp Arg Arg Leu Leu Ser Phe Leu Gly Arg Gln
          115          120          125
Leu Glu Ala Pro Leu Pro Pro Met Met Ala Ser Leu Pro Lys Lys Thr
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&lt;210&gt; 6277

&lt;211&gt; 1206

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6277

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<210> 6278

<211> 399

<212> PRT

<213> Homo sapiens

<400> 6278

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Asn	Arg	Lys	His	Ile	Ser	Pro	Ala	Phe	Gln	Pro	Pro	Leu	Pro	Pro	Thr
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Asp	Gly	Ser	Thr	Val	Val	Pro	Ala	Gly	Pro	Glu	Pro	Pro	Pro	Gln	Ser
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Pro	Lys	Asp	Pro	Val	Ser	Ala	Ala	Val	Pro	Ala	Pro	Xaa	Glu	Lys	Gln
			100					105					110		
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Pro	Gly	Asn	Pro	Pro	Pro	Gly	His	Pro	Gly	Gly	Gln	Ser	Ser	Ser	Gly
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Thr	Ser	Gln	His	Pro	Pro	Ser	Leu	Ser	Pro	Lys	Pro	Pro	Thr	Arg	Ser
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&lt;210&gt; 6279

&lt;211&gt; 2795

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6279

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<211> 619

<212> PRT

<213> Homo sapiens

<400> 6280

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 50 55 60  
 His Gly Leu Arg His Gly Asp Phe Gln Arg Tyr Arg Gly Tyr Cys Ser  
 65 70 75 80  
 Arg Arg Gln Arg Arg Leu Arg Lys Thr Leu Asn Phe Lys Met Gly Asn  
 85 90 95  
 Arg His Lys Phe Thr Gly Lys Lys Val Thr Glu Glu Leu Leu Thr Asp  
 100 105 110  
 Asn Arg Tyr Leu Leu Val Leu Met Asp Ala Glu Arg Ala Trp Ser  
 115 120 125  
 Tyr Ala Met Gln Leu Lys Gln Glu Ala Asn Thr Glu Pro Arg Lys Arg  
 130 135 140  
 Phe His Leu Leu Ser Arg Leu Arg Lys Ala Val Lys His Ala Glu Glu  
 145 150 155 160  
 Leu Glu Arg Leu Cys Lys Ser Asn Arg Val Asp Ala Lys Thr Lys Leu  
 165 170 175  
 Glu Ala Gln Ala Tyr Thr Ala Tyr Leu Ser Gly Met Leu Arg Phe Glu  
 180 185 190  
 His Gln Glu Trp Lys Ala Ala Ile Glu Ala Phe Asn Lys Cys Lys Thr  
 195 200 205  
 Ile Tyr Glu Lys Leu Ala Ser Ala Phe Thr Glu Glu Gln Ala Val Leu  
 210 215 220  
 Tyr Asn Gln Arg Val Glu Glu Ile Ser Pro Asn Ile Arg Tyr Cys Ala  
 225 230 235 240  
 Tyr Asn Ile Gly Asp Gln Ser Ala Ile Asn Glu Leu Met Gln Met Arg  
 245 250 255  
 Leu Arg Ser Gly Gly Thr Glu Gly Leu Leu Ala Glu Lys Leu Glu Ala  
 260 265 270  
 Leu Ile Thr Gln Thr Arg Ala Lys Gln Ala Ala Thr Met Ser Glu Val  
 275 280 285  
 Glu Trp Arg Gly Arg Thr Val Pro Val Lys Ile Asp Lys Val Arg Ile  
 290 295 300  
 Phe Leu Leu Gly Leu Ala Asp Asn Glu Ala Ala Ile Val Gln Ala Glu  
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 Ser Glu Glu Thr Lys Glu Arg Leu Phe Glu Ser Met Leu Ser Glu Cys  
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      370      375      380
Lys Arg Asn Glu Asn Met Ala Lys Gly Leu His Arg Ala Leu Leu Gln
      385      390      395      400
Gln Gln Pro Glu Asp Asp Ser Lys Arg Ser Pro Arg Pro Gln Asp Leu
      405      410      415
Ile Arg Leu Tyr Asp Ile Ile Leu Gln Asn Leu Val Glu Leu Leu Gln
      420      425      430
Leu Pro Gly Leu Glu Glu Asp Lys Ala Phe Gln Lys Glu Ile Gly Leu
      435      440      445
Lys Thr Leu Val Phe Lys Ala Tyr Arg Cys Phe Phe Ile Ala Gln Ser
      450      455      460
Tyr Val Leu Val Lys Lys Trp Ser Glu Ala Leu Val Leu Tyr Asp Arg
      465      470      475      480
Val Leu Lys Tyr Ala Asn Glu Val Asn Ser Asp Ala Gly Ala Phe Lys
      485      490      495
Asn Ser Leu Lys Asp Leu Pro Asp Val Gln Glu Leu Ile Thr Gln Val
      500      505      510
Arg Ser Glu Lys Cys Ser Leu Gln Ala Ala Ala Ile Leu Asp Ala Asn
      515      520      525
Asp Ala His Gln Thr Glu Thr Ser Ser Ser Gln Val Lys Asp Asn Lys
      530      535      540
Pro Leu Val Glu Arg Phe Glu Thr Phe Cys Leu Asp Pro Ser Leu Val
      545      550      555      560
Thr Lys Gln Ala Asn Leu Val His Phe Pro Pro Gly Phe Gln Pro Ile
      565      570      575
Pro Cys Lys Pro Leu Phe Phe Asp Leu Ala Leu Asn His Val Ala Phe
      580      585      590
Pro Pro Leu Glu Asp Lys Leu Glu Gln Lys Thr Lys Ser Gly Leu Thr
      595      600      605
Gly Tyr Ile Lys Gly Ile Phe Gly Phe Arg Ser
      610      615

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&lt;210&gt; 6281

&lt;211&gt; 741

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6281

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&lt;210&gt; 6282

&lt;211&gt; 162

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6282

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			20					25					30		
Glu	Lys	Lys	Gln	Met	Val	Ala	Asn	Val	Glu	Lys	Gln	Leu	Glu	Glu	Ala
		35					40					45			
Lys	Glu	Leu	Leu	Glu	Gln	Met	Asp	Leu	Glu	Val	Arg	Glu	Ile	Pro	Pro
	50					55					60				
Gln	Ser	Arg	Gly	Met	Tyr	Ser	Asn	Arg	Met	Arg	Ser	Tyr	Lys	Gln	Glu
65				70					75					80	
Met	Gly	Lys	Leu	Glu	Thr	Asp	Phe	Lys	Arg	Ser	Arg	Ile	Ala	Tyr	Ser
			85						90					95	
Asp	Glu	Val	Arg	Asn	Glu	Leu	Leu	Gly	Asp	Asp	Gly	Asn	Ser	Ser	Glu
			100					105				110			
Asn	Gln	Arg	Ala	His	Leu	Leu	Asp	Asn	Thr	Glu	Arg	Leu	Glu	Arg	Ser
		115					120					125			
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&lt;210&gt; 6283

&lt;211&gt; 2312

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6283

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&lt;210&gt; 6284

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6284

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			20					25					30		
Lys	Pro	Ile	His	Val	Phe	Phe	Gly	Ala	Ala	Ile	Leu	Ser	Leu	Ser	Ile
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&lt;210&gt; 6285

&lt;211&gt; 2542

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6285

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 <212> PRT  
 <213> Homo sapiens

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&lt;210&gt; 6288

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 <213> Homo sapiens

<400> 6288

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           35           40           45
Ser Val Lys Leu Asp Glu His Ile Ile Pro Leu Gly Ser Met Ala Ile
           50           55           60
Asn Ser Ile Ser Lys Leu Thr Gln Leu Thr Gln Ser Ser Met Tyr Ser
65           70           75           80
Leu Pro Asn Ala Pro Thr Leu Ala Asp Leu Glu Asp Asp Thr His Glu
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Ala Ser Asp Asp Gln Pro Glu Lys Pro His Phe Asp Ser Arg Ser Val
           100          105          110
Ile Phe Glu Leu Asp Ser Cys Asn Gly Ser Gly Lys Val Cys Leu Val
           115          120          125
Tyr Lys Ser Gly Lys Pro Ala Leu Ala Glu Asp Thr Glu Ile Trp Phe
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Leu Asp Arg Ala Leu Tyr Trp His Phe Leu Thr Asp Thr Phe Thr Ala
145          150          155          160
Tyr Tyr Arg Leu Leu Ile Thr His Leu Gly Leu Pro Gln Trp Gln Tyr
           165          170          175
Ala Phe Thr Ser Tyr Gly Ile Ser Pro Gln Ala Lys Gln Trp Phe Ser
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Met Tyr Lys Pro Ile Thr Tyr Asn Thr Asn Leu Leu Thr Glu Glu Thr
           195          200          205
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Asn Lys Ile Val Ile Pro Lys Lys Lys Gly Pro Val Gln Pro Ala Gly
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<210> 6289  
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<400> 6289

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&lt;210&gt; 6290

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6290

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			20					25					30		
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			35				40					45			
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			50				55				60				
Gln	Arg	Ser	Lys	Gln	Ala	Leu	Gln	Glu	Leu	Thr	Gln	Asn	Gln	Val	Val



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		85		90		95									
Ser	Met	Leu	Asp	Ile	Asn	Ala	Leu	Phe	Ala	Glu	Ala	Lys	His	Tyr	His
		100		105		110									
Ala	Lys	Leu	Val	Asn	Ile	Arg	Lys	Glu	Met	Leu	Met	Leu	His	Glu	Lys
		115		120		125									
Thr	Ser	Lys	Leu	Lys	Lys	Arg	Ala	Leu	Lys	Leu	Gln	Gln	Lys	Arg	Gln
		130		135		140									
Lys	Glu	Glu	Leu	Glu	Arg	Glu	Gln	Gln	Arg	Glu	Lys	Gly	Phe	Glu	Arg
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Glu	Lys	Gln	Leu	Thr	Ala	Arg	Pro	Ala	Lys	Arg	Met				
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&lt;210&gt; 6291

&lt;211&gt; 2718

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6291

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<211> 497

<212> PRT

<213> Homo sapiens

<400> 6292

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Ala	Leu	Trp	Leu	Arg	Phe	Lys	Tyr	Tyr	Ser	Phe	Phe	Asp	Leu	Asp	Pro
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Val	Leu	Asp	Ser	Leu	Thr	Thr	Ile	Pro	Glu	Leu	Lys	Asp	Tyr	Leu	Arg
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Ile	Phe	Arg	Pro	Arg	Lys	Leu	Thr	Leu	Lys	Gly	Tyr	Arg	Gln	His	Trp
	195					200						205			
Val	Val	Phe	Lys	Glu	Thr	Thr	Leu	Ser	Tyr	Tyr	Lys	Ser	Gln	Asp	Glu
	210					215					220				
Ala	Pro	Gly	Asp	Pro	Ile	Gln	Gln	Leu	Asn	Leu	Lys	Gly	Cys	Glu	Val
225				230						235				240	
Val	Pro	Asp	Val	Asn	Val	Ser	Gly	Gln	Lys	Phe	Cys	Ile	Lys	Leu	Leu
			245					250					255		
Val	Pro	Ser	Pro	Glu	Gly	Met	Ser	Glu	Ile	Tyr	Leu	Arg	Cys	Gln	Asp
	260						265						270		
Glu	Gln	Gln	Tyr	Ala	Arg	Trp	Met	Ala	Gly	Cys	Arg	Leu	Ala	Ser	Lys
	275					280						285			
Gly	Arg	Thr	Met	Ala	Asp	Ser	Ser	Tyr	Thr	Ser	Glu	Val	Gln	Ala	Ile
	290					295					300				
Leu	Ala	Phe	Leu	Ser	Leu	Gln	His	Gly	Gln	Trp	Gly	Pro	Arg	Gln	Pro
305				310						315				320	
Pro	Pro	Arg	Pro	Asp	Ala	Ser	Ala	Glu	Gly	Leu	Asn	Pro	Tyr	Gly	Leu
			325					330					335		
Val	Ala	Pro	Arg	Phe	Gln	Arg	Lys	Phe	Lys	Ala	Lys	Gln	Leu	Thr	Pro

	340		345		350										
Arg	Ile	Leu	Glu	Ala	His	Gln	Asn	Val	Ala	Gln	Leu	Ser	Leu	Ala	Glu
	355					360					365				
Ala	Gln	Leu	Arg	Phe	Ile	Gln	Ala	Trp	Gln	Ser	Leu	Pro	Asp	Phe	Gly
	370					375					380				
Ile	Ser	Tyr	Val	Met	Val	Arg	Phe	Lys	Gly	Ser	Arg	Lys	Asp	Glu	Ile
385					390					395				400	
Leu	Gly	Ile	Ala	Asn	Asn	Arg	Leu	Ile	Arg	Ile	Asp	Leu	Ala	Val	Gly
			405					410			415				
Asp	Val	Val	Lys	Thr	Trp	Arg	Phe	Ser	Asn	Met	Arg	Gln	Trp	Asn	Val
		420						425			430				
Asn	Trp	Asp	Ile	Arg	Gln	Val	Ala	Ile	Glu	Phe	Asp	Glu	His	Ile	Asn
	435					440					445				
Val	Ala	Phe	Ser	Cys	Val	Ser	Ala	Ser	Cys	Arg	Ile	Val	His	Glu	Tyr
	450				455					460					
Ile	Gly	Gly	Tyr	Ile	Phe	Leu	Ser	Thr	Arg	Glu	Arg	Ala	Arg	Gly	Glu
465				470					475					480	
Glu	Leu	Asp	Glu	Asp	Leu	Phe	Leu	Gln	Leu	Thr	Gly	Gly	His	Glu	Ala
			485					490					495		
Phe															

&lt;210&gt; 6293

&lt;211&gt; 750

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6293

```

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gacatctcgg gcgtgctgta cgacagcggc gcgtgcggcg gcacggccat cgccggctcg
120
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180
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240
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360
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420
aacgccttcc aggtgctcat ggagctggaa aaacctgtgc tcatatcact gggaaaaggg
480
cgttactaca aggagacctc tggcctgatg ctggacgttg gtccctacat gaaggcgctt
540
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600
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660
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720
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750

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<210> 6294  
 <211> 250  
 <212> PRT  
 <213> Homo sapiens

<400> 6294  
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 Gly Gly Thr Ala Ile Ala Gly Ser Val Glu Ala Val Ala Arg Leu Lys  
 35 40 45  
 Arg Ser Arg Leu Lys Val Arg Phe Cys Thr Asn Glu Ser Gln Lys Ser  
 50 55 60  
 Arg Ala Glu Leu Val Gly Gln Leu Gln Arg Leu Gly Phe Asp Ile Ser  
 65 70 75 80  
 Glu Gln Glu Val Thr Ala Pro Ala Pro Ala Ala Cys Gln Ile Leu Lys  
 85 90 95  
 Glu Arg Gly Leu Arg Pro Tyr Leu Leu Ile His Asp Gly Val Arg Ser  
 100 105 110  
 Glu Phe Asp Gln Ile Asp Thr Ser Asn Pro Asn Cys Val Val Ile Ala  
 115 120 125  
 Asp Ala Gly Glu Ser Phe Ser Tyr Gln Asn Met Asn Asn Ala Phe Gln  
 130 135 140  
 Val Leu Met Glu Leu Glu Lys Pro Val Leu Ile Ser Leu Gly Lys Gly  
 145 150 155 160  
 Arg Tyr Tyr Lys Glu Thr Ser Gly Leu Met Leu Asp Val Gly Pro Tyr  
 165 170 175  
 Met Lys Ala Leu Glu Tyr Ala Cys Gly Ile Lys Ala Glu Val Val Gly  
 180 185 190  
 Lys Pro Ser Pro Glu Phe Phe Lys Ser Ala Leu Gln Ala Ile Gly Val  
 195 200 205  
 Glu Ala His Gln Ala Val Met Ile Gly Asp Asp Ile Val Gly Asp Val  
 210 215 220  
 Gly Gly Ala Gln Arg Cys Gly Met Arg Ala Leu Gln Val Arg Thr Gly  
 225 230 235 240  
 Lys Phe Arg Pro Ser Asp Glu His His Pro  
 245 250

<210> 6295  
 <211> 2091  
 <212> DNA  
 <213> Homo sapiens

<400> 6295  
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 120  
 cgcgcgcggg cagccctcgg gctgtggggc cgggtagttg aacgggtcga ggccggggga  
 180  
 ggcgtggggc cgtttcaggc ctgcggctgt cggctggtgc ttggcggcag ggacgatgtg  
 240

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300  
ttgcagaggc ctcccagacc cgagggtgcc agggcattcc ggaggcagcc gagggcagca  
360  
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420  
ggtgcttcaa gtgttgttg aagtggaggc agcagtgaca aggggaagct ttccctgcag  
480  
gatgtagctg agctgattcg ggccagagcc tgccagaggg tgggtggtcat ggtgggggcc  
540  
ggcatcagca caccagtggt cattccagac ttcagatcgc cggggagtgg cctgtacagc  
600  
aacctccagc agtacgatct cccgtacccc gagggcattt ttgaactccc attcttcttt  
660  
cacaacccca agcccttttt cactttggcc aaggagctgt accctggaaa ctacaagccc  
720  
aacgtcactc actactttct ccggtgctt catgacaagg ggctgcttct gcggtcttac  
780  
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840  
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900  
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960  
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1020  
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1080  
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1200  
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1320  
gccgtgcgga cgtcagttcc ccgactgctc atcaaccggg acttggtggg gcccttggct  
1380  
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1440  
ctagtggagc ttctgggctg gacagaagag atgcgggacc ttgtgcagcg ggaaactggg  
1500  
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1560  
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1620  
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1680  
catgagctgc agtgactggg agggctgtgt ttacagtcag ggccaccccg tcacatatac  
1740  
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1800  
aaaaagcttt cttctgactg tgaccctctt gaactgaatc agaccaactg gaatcccaga  
1860

ccgagtcctgc tttctgtgcc tagttgaacg gcaagctcgg catctgttgg ttacaagatc  
 1920  
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 1980  
 tgggtccgca cttctagcat gttgggtctcc tttagtgggg ctatttttaa tgagagaaaa  
 2040  
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 2091

<210> 6296

<211> 399

<212> PRT

<213> Homo sapiens

<400> 6296

Met	Ala	Phe	Trp	Gly	Trp	Arg	Ala	Ala	Ala	Ala	Leu	Arg	Leu	Trp	Gly	1	5	10	15
Arg	Val	Val	Glu	Arg	Val	Glu	Ala	Gly	Gly	Gly	Val	Gly	Pro	Phe	Gln	20	25	30	
Ala	Cys	Gly	Cys	Arg	Leu	Val	Leu	Gly	Gly	Arg	Asp	Asp	Val	Ser	Ala	35	40	45	
Gly	Leu	Arg	Gly	Ser	His	Gly	Ala	Arg	Gly	Glu	Pro	Leu	Asp	Pro	Ala	50	55	60	
Arg	Pro	Leu	Gln	Arg	Pro	Pro	Arg	Pro	Glu	Val	Pro	Arg	Ala	Phe	Arg	65	70	75	80
Arg	Gln	Pro	Arg	Ala	Ala	Pro	Ser	Phe	Phe	Phe	Ser	Ser	Ile	Lys		85	90	95	
Gly	Gly	Arg	Arg	Ser	Ile	Ser	Phe	Ser	Val	Gly	Ala	Ser	Ser	Val	Val	100	105	110	
Gly	Ser	Gly	Gly	Ser	Ser	Asp	Lys	Gly	Lys	Leu	Ser	Leu	Gln	Asp	Val	115	120	125	
Ala	Glu	Leu	Ile	Arg	Ala	Arg	Ala	Cys	Gln	Arg	Val	Val	Val	Met	Val	130	135	140	
Gly	Ala	Gly	Ile	Ser	Thr	Pro	Ser	Gly	Ile	Pro	Asp	Phe	Arg	Ser	Pro	145	150	155	160
Gly	Ser	Gly	Leu	Tyr	Ser	Asn	Leu	Gln	Gln	Tyr	Asp	Leu	Pro	Tyr	Pro	165	170	175	
Glu	Ala	Ile	Phe	Glu	Leu	Pro	Phe	Phe	Phe	His	Asn	Pro	Lys	Pro	Phe	180	185	190	
Phe	Thr	Leu	Ala	Lys	Glu	Leu	Tyr	Pro	Gly	Asn	Tyr	Lys	Pro	Asn	Val	195	200	205	
Thr	His	Tyr	Phe	Leu	Arg	Leu	Leu	His	Asp	Lys	Gly	Leu	Leu	Leu	Arg	210	215	220	
Leu	Tyr	Thr	Gln	Asn	Ile	Asp	Gly	Leu	Glu	Arg	Val	Ser	Gly	Ile	Pro	225	230	235	240
Ala	Ser	Lys	Leu	Val	Glu	Ala	His	Gly	Thr	Phe	Ala	Ser	Ala	Thr	Cys	245	250	255	
Thr	Val	Cys	Gln	Arg	Pro	Phe	Pro	Gly	Glu	Asp	Ile	Arg	Ala	Asp	Val	260	265	270	
Met	Ala	Asp	Arg	Val	Pro	Arg	Cys	Pro	Val	Cys	Thr	Gly	Val	Val	Lys	275	280	285	
Pro	Asp	Ile	Val	Phe	Phe	Gly	Glu	Pro	Leu	Pro	Gln	Arg	Phe	Leu	Leu	290	295	300	
His	Val	Val	Asp	Phe	Pro	Met	Ala	Asp	Leu	Leu	Leu	Ile	Leu	Gly	Thr				

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305          310          315          320
Ser Leu Glu Val Glu Pro Phe Ala Ser Leu Thr Glu Ala Val Arg Ser
          325          330          335
Ser Val Pro Arg Leu Leu Ile Asn Arg Asp Leu Val Gly Pro Leu Ala
          340          345          350
Trp His Pro Arg Ser Arg Asp Val Ala Gln Leu Gly Asp Val Val His
          355          360          365
Gly Val Glu Ser Leu Val Glu Leu Leu Gly Trp Thr Glu Glu Met Arg
          370          375          380
Asp Leu Val Gln Arg Glu Thr Gly Lys Leu Asp Gly Pro Asp Lys
385          390          395

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<210> 6297  
 <211> 472  
 <212> DNA  
 <213> Homo sapiens

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<400> 6297
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120
ttcgggaagcc cgttcggcct ggaggagccg cagtgggtcc cggacaagga gtgtcggaga
180
tgtatgcagt gtgacgcaa gtttgacttt ctcaccagaa agcaccactg tcgccgtgctg
240
gggaagtgtc tctgcgacag gtgctgcagc cagaagggtc cgctgcggcg catgtgcttt
300
gtggaccccg tgcggcagtg cgcggagtg gccctggtgt ccctcaagga ggccgagttc
360
tacgacaagc agctcaaagt gtcctgagc ggtaaggacg ggtgtcctgc acagtctctg
420
gcgctccgcc agccggctcc tcgtgtctgt ggcgatgctg tgggctgtgc ac
472

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<210> 6298  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

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<400> 6298
Met Ser Ser Glu Val Ser Ala Arg Arg Asp Ala Lys Lys Leu Val Arg
1      5      10      15
Ser Pro Ser Gly Leu Arg Met Val Pro Glu His Arg Ala Phe Gly Ser
20     25     30
Pro Phe Gly Leu Glu Glu Pro Gln Trp Val Pro Asp Lys Glu Cys Arg
35     40     45
Arg Cys Met Gln Cys Asp Ala Lys Phe Asp Phe Leu Thr Arg Lys His
50     55     60
His Cys Arg Arg Cys Gly Lys Cys Phe Cys Asp Arg Cys Cys Ser Gln
65     70     75     80
Lys Val Pro Leu Arg Arg Met Cys Phe Val Asp Pro Val Arg Gln Cys
85     90     95
Ala Glu Cys Ala Leu Val Ser Leu Lys Glu Ala Glu Phe Tyr Asp Lys

```



	100		105		110										
Gln	Leu	Lys	Val	Leu	Leu	Ser	Gly	Lys	Asp	Gly	Cys	Pro	Ala	Gln	Ser
	115				120						125				
Cys	Ala	Leu	Arg	Gln	Pro	Ala	Pro	Arg	Val	Cys	Gly	Asp	Ala	Val	Gly
	130				135						140				
Cys	Ala														
145															

&lt;210&gt; 6299

&lt;211&gt; 1466

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6299

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120
ggcggccagc ccgcccattg gcccgaggag agcctgggtc tgtaccactg gacccagtcc
180
ttcagctcgc agaaggtgcg gctgggtgatc gccgagaagg gcctgggtgtg cgaggagcgg
240
gacgtgagcc tgccacagag cgagcacaag gagccctggg tcatgcggct caacctgggc
300
gaggaggtgc ccgtcatcat ccaccgcgac aacatcatca gtgactatga ccagatcatt
360
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420
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480
gcctacacgc atggctgcat cctgcatccc gagctcacca ccgactccat gatccccaa
540
tacgccacgg ccgagatccg cagacattta gccaatgcca ccacggacct catgaaactg
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660
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720
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780
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840
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900
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960
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1080
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1140
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1200

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 1320  
 gctaaaagag agagaaggaa cgagagagag agagaaaaaa caaaaaacca gaaaaccacg  
 1380  
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 1440  
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 1466

<210> 6300

<211> 372

<212> PRT

<213> Homo sapiens

<400> 6300

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			20					25					30		
Ser	Gly	Gly	Pro	Arg	Arg	Ser	Arg	Gly	Gly	Gln	Pro	Ala	His	Trp	Pro
			35				40						45		
Arg	Glu	Ser	Leu	Val	Leu	Tyr	His	Trp	Thr	Gln	Ser	Phe	Ser	Ser	Gln
	50					55				60					
Lys	Val	Arg	Leu	Val	Ile	Ala	Glu	Lys	Gly	Leu	Val	Cys	Glu	Glu	Arg
65					70					75				80	
Asp	Val	Ser	Leu	Pro	Gln	Ser	Glu	His	Lys	Glu	Pro	Trp	Phe	Met	Arg
				85					90					95	
Leu	Asn	Leu	Gly	Glu	Glu	Val	Pro	Val	Ile	Ile	His	Arg	Asp	Asn	Ile
			100					105					110		
Ile	Ser	Asp	Tyr	Asp	Gln	Ile	Ile	Asp	Tyr	Val	Glu	Arg	Thr	Phe	Thr
		115				120						125			
Gly	Glu	His	Val	Val	Ala	Leu	Met	Pro	Glu	Val	Gly	Ser	Leu	Gln	His
	130					135					140				
Ala	Arg	Val	Leu	Gln	Tyr	Arg	Glu	Leu	Leu	Asp	Ala	Leu	Pro	Met	Asp
145					150					155				160	
Ala	Tyr	Thr	His	Gly	Cys	Ile	Leu	His	Pro	Glu	Leu	Thr	Thr	Asp	Ser
			165						170					175	
Met	Ile	Pro	Lys	Tyr	Ala	Thr	Ala	Glu	Ile	Arg	Arg	His	Leu	Ala	Asn
			180					185					190		
Ala	Thr	Thr	Asp	Leu	Met	Lys	Leu	Asp	His	Glu	Glu	Glu	Pro	Gln	Leu
		195					200					205			
Ser	Glu	Pro	Tyr	Leu	Ser	Lys	Gln	Lys	Lys	Leu	Met	Ala	Lys	Ile	Leu
	210					215					220				
Glu	His	Asp	Asp	Val	Ser	Tyr	Leu	Lys	Lys	Ile	Leu	Gly	Glu	Leu	Ala
225				230						235				240	
Met	Val	Leu	Asp	Gln	Ile	Glu	Ala	Glu	Leu	Glu	Lys	Arg	Lys	Leu	Glu
			245						250					255	
Asn	Glu	Gly	Gln	Lys	Cys	Glu	Leu	Trp	Leu	Cys	Gly	Cys	Ala	Phe	Thr
		260						265					270		
Leu	Ala	Asp	Val	Leu	Leu	Gly	Ala	Thr	Leu	His	Arg	Leu	Lys	Phe	Leu
		275					280						285		
Gly	Leu	Ser	Lys	Lys	Tyr	Trp	Glu	Asp	Gly	Ser	Arg	Pro	Asn	Leu	Gln

290		295		300
Ser Phe Phe Glu Arg Val Gln Arg Arg Phe Ala Phe Arg Lys Val Leu				
305		310		315
Gly Asp Ile His Thr Thr Leu Leu Ser Ala Val Ile Pro Asn Ala Phe				
	325		330	335
Arg Leu Val Lys Arg Lys Pro Pro Ser Phe Phe Gly Ala Ser Phe Leu				
	340		345	350
Met Gly Ser Leu Gly Gly Met Gly Tyr Phe Ala Tyr Trp Tyr Leu Lys				
	355		360	365
Lys Lys Tyr Ile				
370				

&lt;210&gt; 6301

&lt;211&gt; 911

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6301

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nnacgggttt tagaaaaaca agaattacag cagccaacct atgttgcctt gagttacata
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120
ccgaagctct cgctgactct gtccagctca gtgtctcgag ggaatgtgtc cactccccc
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780
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840
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900
atgttgcaaa a
911

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&lt;210&gt; 6302

&lt;211&gt; 202

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6302

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&lt;210&gt; 6303

&lt;211&gt; 676

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6303

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<210> 6304

<211> 181

<212> PRT

<213> Homo sapiens

<400> 6304

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			20					25					30		
Val	Phe	Val	Glu	Ser	Ser	Glu	Thr	Leu	Asp	Tyr	Gln	Met	Ala	Phe	Ala
	35					40					45				
Asp	Ser	His	Leu	Trp	Lys	Leu	Leu	Asp	Arg	His	Ala	Asn	Thr	Ile	Arg
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Leu	Phe	Val	Leu	Leu	Pro	Glu	Gln	Ser	Pro	Val	Ser	Tyr	Ser	Lys	Arg
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Thr	Ala	Tyr	Gln	Lys	Ala	Gly	Gly	Asp	Ser	Gly	Asn	Val	Asp	Asp	Asp
			85					90					95		
Cys	Glu	Arg	Val	Lys	Gly	Pro	Val	Gly	Ser	Leu	Lys	Ser	Val	Glu	Ala
			100					105					110		
Ile	Leu	Glu	Glu	Ser	Thr	Glu	Lys	Leu	Lys	Ser	Leu	Ser	Leu	Gln	Gln
	115						120					125			
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<210> 6305

<211> 3853

<212> DNA

<213> Homo sapiens

<400> 6305

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<210> 6306

<211> 474

<212> PRT

<213> Homo sapiens

<400> 6306

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Thr	Trp	Asp	Ser	Thr	Phe	Cys	Ala	Val	Asn	Pro	Lys	Phe	Leu	Ala	Val
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Ile	Val	Glu	Ala	Ser	Gly	Gly	Gly	Ala	Phe	Leu	Val	Leu	Pro	Leu	Ser
	50					55					60				
Lys	Thr	Gly	Arg	Ile	Asp	Lys	Ala	Tyr	Pro	Thr	Val	Cys	Gly	His	Thr
65					70					75				80	
Gly	Pro	Val	Leu	Asp	Ile	Asp	Trp	Cys	Pro	His	Asn	Asp	Gln	Val	Ile
			85						90				95		
Ala	Ser	Gly	Ser	Glu	Asp	Cys	Thr	Val	Met	Val	Trp	Gln	Ile	Pro	Glu
			100					105					110		
Asn	Gly	Leu	Thr	Ser	Pro	Leu	Thr	Glu	Pro	Val	Val	Val	Leu	Glu	Gly
		115					120					125			
His	Thr	Lys	Arg	Val	Gly	Ile	Ile	Ala	Trp	His	Pro	Thr	Ala	Arg	Asn
		130				135					140				
Val	Leu	Leu	Ser	Ala	Gly	Cys	Asp	Asn	Val	Val	Leu	Ile	Trp	Asn	Val
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Cys	Lys	Asp	Lys	Ser	Val	Arg	Ile	Ile	Asp	Pro	Arg	Arg	Gly	Thr	Leu
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Val	Ala	Glu	Arg	Glu	Lys	Ala	His	Glu	Gly	Ala	Arg	Pro	Met	Arg	Ala
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Ile	Phe	Leu	Ala	Asp	Gly	Lys	Val	Phe	Thr	Thr	Gly	Phe	Ser	Arg	Met
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Ser	Glu	Arg	Gln	Leu	Ala	Leu	Trp	Asn	Pro	Lys	Asn	Met	Gln	Glu	Pro
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		260					265					270			
Tyr	Asp	Pro	Asp	Thr	Ser	Ile	Ile	Tyr	Leu	Cys	Gly	Lys	Gly	Asp	Ser



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Leu Asn Thr Phe Ser Ser Lys Glu Pro Gln Arg Gly Met Gly Tyr Met		
305	310	315
Pro Lys Arg Gly Leu Asp Val Asn Lys Cys Glu Ile Ala Arg Phe Phe		
325	330	335
Lys Leu His Glu Arg Lys Cys Glu Pro Ile Ile Met Thr Val Pro Arg		
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Lys Ser Asp Leu Phe Gln Asp Asp Leu Tyr Pro Asp Thr Ala Gly Pro		
355	360	365
Glu Ala Ala Leu Glu Ala Glu Glu Trp Phe Glu Gly Lys Asn Ala Asp		
370	375	380
Pro Ile Leu Ile Ser Leu Lys His Gly Tyr Ile Pro Gly Lys Asn Arg		
385	390	395
Asp Leu Lys Val Val Lys Lys Asn Ile Leu Asp Ser Lys Pro Thr Ala		
405	410	415
Asn Lys Lys Cys Asp Leu Ile Ser Ile Pro Lys Lys Thr Thr Asp Thr		
420	425	430
Ala Ser Val Gln Asn Glu Ala Lys Leu Asp Glu Ile Leu Lys Glu Ile		
435	440	445
Lys Ser Ile Lys Asp Thr Ile Cys Asn Gln Asp Glu Arg Ile Ser Lys		
450	455	460
Leu Glu Gln Gln Met Ala Lys Ile Ala Ala		
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&lt;210&gt; 6307

&lt;211&gt; 2119

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6307

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&lt;210&gt; 6308

&lt;211&gt; 483

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6308

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Phe Ile Gln Arg Phe Glu Met Lys Arg Ser Pro Glu Glu Lys Gln Glu
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100          105          110
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Ile Ala Lys Leu Ala Ala Trp Gly Lys Glu Leu Met Glu Gly Ser Asp
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165          170          175
Leu Arg Gly Ser Gly Val Ala Val Glu Thr Gly Thr Val Ser Ser Ser
180          185          190
Asp Ser Ser Gln Tyr Val Gln Cys Val Ala Gly Cys Leu Gln Leu Met
195          200          205
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245          250          255
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Phe Arg Asn Phe Leu Glu Lys Ser Thr Glu Arg Glu Thr Arg Gln Glu
290          295          300
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Leu Glu Gln Gln Lys Tyr Asp Asp Glu Asp Ile Ser Glu Asp Ile Lys
325          330          335
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340          345          350
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355          360          365
Val His Lys Ser Glu Lys Phe Trp Arg Glu Asn Ala Val Arg Leu Asn
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Ser Asp Asp Pro Gln Val Leu Ala Val Ala Ala His Asp Val Gly Glu

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Arg Tyr Asn Ala Leu Leu Ala Val Gln Lys Leu Met Val His Asn Trp
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Glu Tyr Leu Gly Lys Gln Leu Gln Ser Glu Gln Pro Gln Thr Ala Ala
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Ala Arg Ser

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&lt;210&gt; 6309

&lt;211&gt; 564

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6309

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&lt;211&gt; 196

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&lt;400&gt; 6322

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**What is claimed is:**

1. An isolated nucleic acid molecule encoding a polypeptide comprising an amino acid sequence that is at least 85% identical to a polypeptide including an amino acid sequence selected from the group consisting of SEQ ID NO:2 $n$ , wherein  $n$  is any integer 1-3161, or the complement thereof.
2. The isolated nucleic acid molecule of claim 1, said molecule hybridizing under stringent conditions to a nucleic acid sequence complementary to a nucleic acid molecule comprising the sequence of nucleotides selected from the group consisting of SEQ ID NO:2 $n$ , wherein  $n$  is any integer 1-3161, or the complement thereof.
3. The isolated nucleic acid molecule of claim 1, said molecule encoding a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2 $n$ , wherein  $n$  is any integer 1-3161, or an amino acid sequence comprising one or more conservative substitutions in the amino acid sequence selected from the group consisting of SEQ ID NO: 2 $n$ .
4. The isolated nucleic acid molecule of claim 1, wherein said molecule encodes a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2 $n$ , wherein  $n$  is any integer 1-3161.
5. The isolated nucleic acid molecule of claim 1, wherein said molecule comprises the sequence of nucleotides selected from the group consisting of SEQ ID NO:2 $n$ -1, wherein  $n$  is any integer 1-3161, or the complement thereof.
6. An oligonucleotide less than 100 nucleotides in length and comprising at least contiguous nucleotides selected from the group consisting of SEQ ID NO:2 $n$ -1, wherein  $n$  is any integer 1-3161, or the complement thereof.
7. A vector comprising the nucleic acid molecule of claim 1.

8. The vector of claim 7, wherein said vector is an expression vector.
9. A host cell comprising the isolated nucleic acid molecule of claim 1.
10. A substantially purified polypeptide comprising an amino acid sequence at least 80% identical to a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO:  $2n$ , wherein  $n$  is any integer 1-3161.
11. The polypeptide of claim 10, wherein said polypeptide comprises the amino acid sequence selected from the group consisting of SEQ ID NO:  $2n$ , wherein  $n$  is any integer 1-3161.
12. An antibody that selectively binds to the polypeptide of claim 10.
13. A pharmaceutical composition comprising a therapeutically or prophylactically effective amount of a therapeutic selected from the group consisting of:
  - a) the nucleic acid of claim 1;
  - b) the polypeptide of claim 10; and
  - c) the antibody of claim 12;and a pharmaceutically acceptable carrier.
14. A kit comprising in one or more containers, a therapeutically or prophylactically effective amount of the pharmaceutical composition of claim 13.
15. A method of producing the polypeptide of claim 10, said method comprising culturing the host cell of claim 9 under conditions in which the nucleic acid molecule is expressed.
16. A method of detecting the presence of the polypeptide of claim 10 in a sample, comprising contacting the sample with a compound that selectively binds to said polypeptide under conditions allowing the formation of a complex between said polypeptide and said

compound, and detecting said complex, if present, thereby identifying said polypeptide in said sample.

17. A method of detecting the presence of a nucleic acid molecule of claim 1 in a sample, the method comprising contacting the sample with a nucleic acid probe or primer that selectively binds to the nucleic acid molecule and determining whether the nucleic acid probe or primer bound to the nucleic acid molecule of claim 1 is present in the sample.

18. A method for modulating the activity of the polypeptide of claim 10, the method comprising contacting a cell sample comprising the polypeptide of claim 10 with a compound that binds to said polypeptide in an amount sufficient to modulate the activity of the polypeptide.

19. The use of a therapeutic in the manufacture of a medicament for treating a syndrome associated with a ORFX-associated disorder, wherein said therapeutic is selected from the group consisting of:

- a) the nucleic acid of claim 1;
- b) the polypeptide of claim 10; and
- c) the antibody of claim 12.

20. A method for screening for a modulator of activity or of latency or predisposition to an ORFX-associated disorder, said method comprising:

- a) contacting a test compound with the polypeptide of claim 10; and
- b) determining if said test compound binds to said polypeptide,

wherein binding of said test compound to said polypeptide indicates the test compound is a modulator of activity or of latency or predisposition to an ORFX-associated disorder.

21. A method for screening for a modulator of activity or of latency or predisposition to an ORFX-associated disorder, said method comprising:

- a) administering a test compound to a test subject at an increased risk ORFX-associated disorder, wherein said test subject recombinantly expresses a polypeptide encoded by the nucleotide of claim 1;

- b) measuring expression the activity of said protein in said test subject;
- c) measuring the activity of said protein in a control subject that recombinantly expresses said protein and is not at increased risk for an ORFX-associated disorder; and
- d) comparing expression of said protein in said test subject and said control subject, wherein a change in the activity of said protein in said test subject relative to said control subject indicates the test compound is a modulator or of latency of predisposition to an ORFX-associated disorder.

22. The method of claim 20, wherein said test animal is a recombinant test animal that expresses a test protein transgene or expresses said transgene under the control of a promoter at an increased level relative to a wild-type test animal, and wherein said promoter is not the native gene promoter of said transgene.

23. A method for determining the presence of or predisposition to a disease associated with altered levels of a polypeptide of claim 11 in a subject, the method comprising:

- a) measuring the amount of the polypeptide in a sample from said subject; and
- b) comparing the amount of said polypeptide in step (a) to the amount of the polypeptide present in a control sample,

wherein an alteration in the level of the polypeptide in step (a) as compared to the control sample indicates the presence of or predisposition to a disease in said subject.

24. The method of claim 23, wherein said subject is a human.

25. A method for determining the presence of or predisposition to a disease associated with altered levels the nucleic acid molecule of claim 1 in a subject, the method comprising:

- a) measuring the amount of the nucleic acid in a sample from the mammalian subject; and
- b) comparing the amount of said nucleic acid in step (a) to the amount of the nucleic acid present in a control sample,



wherein an alteration in the level of the nucleic acid in step (a) as compared to the control sample indicates the presence of or predisposition to said disease in said subject.

26. The method of claim 25, wherein said subject is a human.

27. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject a polypeptide of claim 10 in an amount sufficient to alleviate or prevent said pathological condition.

28. The method of claim 27, wherein said subject is a human.

29. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject a nucleic acid molecule of claim 1 in an amount sufficient to alleviate or prevent said pathological condition.

30. The method of claim 29, wherein said subject is a human.

31. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject an antibody of claim 12 in an amount sufficient to alleviate or prevent said pathological condition.

32. The method of claim 31, wherein said subject is a human.



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35 40 45  
Gln Asp Met Glu Gln Gln Tyr Leu Ser Thr Gly Tyr Leu Gln Ile Ala  
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Glu Arg Arg Glu Pro Ile Gly Ser Met Ser Ser Met Glu Val Asn Val  
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195

**What is claimed is:**

1. An isolated nucleic acid molecule encoding a polypeptide comprising an amino acid sequence that is at least 85% identical to a polypeptide including an amino acid sequence selected from the group consisting of SEQ ID NO:2 $n$ , wherein  $n$  is any integer 1-3161, or the complement thereof.
2. The isolated nucleic acid molecule of claim 1, said molecule hybridizing under stringent conditions to a nucleic acid sequence complementary to a nucleic acid molecule comprising the sequence of nucleotides selected from the group consisting of SEQ ID NO:2 $n$ , wherein  $n$  is any integer 1-3161, or the complement thereof.
3. The isolated nucleic acid molecule of claim 1, said molecule encoding a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2 $n$ , wherein  $n$  is any integer 1-3161, or an amino acid sequence comprising one or more conservative substitutions in the amino acid sequence selected from the group consisting of SEQ ID NO: 2 $n$ .
4. The isolated nucleic acid molecule of claim 1, wherein said molecule encodes a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2 $n$ , wherein  $n$  is any integer 1-3161.
5. The isolated nucleic acid molecule of claim 1, wherein said molecule comprises the sequence of nucleotides selected from the group consisting of SEQ ID NO:2 $n$ -1, wherein  $n$  is any integer 1-3161, or the complement thereof.
6. An oligonucleotide less than 100 nucleotides in length and comprising at least contiguous nucleotides selected from the group consisting of SEQ ID NO:2 $n$ -1, wherein  $n$  is any integer 1-3161, or the complement thereof.
7. A vector comprising the nucleic acid molecule of claim 1.

8. The vector of claim 7, wherein said vector is an expression vector.
9. A host cell comprising the isolated nucleic acid molecule of claim 1.
10. A substantially purified polypeptide comprising an amino acid sequence at least 80% identical to a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2*n*, wherein *n* is any integer 1-3161.
11. The polypeptide of claim 10, wherein said polypeptide comprises the amino acid sequence selected from the group consisting of SEQ ID NO: 2*n*, wherein *n* is any integer 1-3161.
12. An antibody that selectively binds to the polypeptide of claim 10.
13. A pharmaceutical composition comprising a therapeutically or prophylactically effective amount of a therapeutic selected from the group consisting of:
  - a) the nucleic acid of claim 1;
  - b) the polypeptide of claim 10; and
  - c) the antibody of claim 12;and a pharmaceutically acceptable carrier.
14. A kit comprising in one or more containers, a therapeutically or prophylactically effective amount of the pharmaceutical composition of claim 13.
15. A method of producing the polypeptide of claim 10, said method comprising culturing the host cell of claim 9 under conditions in which the nucleic acid molecule is expressed.
16. A method of detecting the presence of the polypeptide of claim 10 in a sample, comprising contacting the sample with a compound that selectively binds to said polypeptide under conditions allowing the formation of a complex between said polypeptide and said

compound, and detecting said complex, if present, thereby identifying said polypeptide in said sample.

17. A method of detecting the presence of a nucleic acid molecule of claim 1 in a sample, the method comprising contacting the sample with a nucleic acid probe or primer that selectively binds to the nucleic acid molecule and determining whether the nucleic acid probe or primer bound to the nucleic acid molecule of claim 1 is present in the sample.

18. A method for modulating the activity of the polypeptide of claim 10, the method comprising contacting a cell sample comprising the polypeptide of claim 10 with a compound that binds to said polypeptide in an amount sufficient to modulate the activity of the polypeptide.

19. The use of a therapeutic in the manufacture of a medicament for treating a syndrome associated with a ORFX-associated disorder, wherein said therapeutic is selected from the group consisting of:

- a) the nucleic acid of claim 1;
- b) the polypeptide of claim 10; and
- c) the antibody of claim 12.

20. A method for screening for a modulator of activity or of latency or predisposition to an ORFX-associated disorder, said method comprising:

- a) contacting a test compound with the polypeptide of claim 10; and
- b) determining if said test compound binds to said polypeptide,

wherein binding of said test compound to said polypeptide indicates the test compound is a modulator of activity or of latency or predisposition to an ORFX-associated disorder.

21. A method for screening for a modulator of activity or of latency or predisposition to an ORFX-associated disorder, said method comprising:

- a) administering a test compound to a test subject at an increased risk ORFX-associated disorder, wherein said test subject recombinantly expresses a polypeptide encoded by the nucleotide of claim 1;

- b) measuring expression the activity of said protein in said test subject;
- c) measuring the activity of said protein in a control subject that recombinantly expresses said protein and is not at increased risk for an ORFX-associated disorder; and
- d) comparing expression of said protein in said test subject and said control subject, wherein a change in the activity of said protein in said test subject relative to said control subject indicates the test compound is a modulator or of latency of predisposition to an ORFX-associated disorder.

22. The method of claim 20, wherein said test animal is a recombinant test animal that expresses a test protein transgene or expresses said transgene under the control of a promoter at an increased level relative to a wild-type test animal, and wherein said promoter is not the native gene promoter of said transgene.

23. A method for determining the presence of or predisposition to a disease associated with altered levels of a polypeptide of claim 11 in a subject, the method comprising:

- a) measuring the amount of the polypeptide in a sample from said subject; and
- b) comparing the amount of said polypeptide in step (a) to the amount of the polypeptide present in a control sample,

wherein an alteration in the level of the polypeptide in step (a) as compared to the control sample indicates the presence of or predisposition to a disease in said subject.

24. The method of claim 23, wherein said subject is a human.

25. A method for determining the presence of or predisposition to a disease associated with altered levels the nucleic acid molecule of claim 1 in a subject, the method comprising:

- a) measuring the amount of the nucleic acid in a sample from the mammalian subject; and
- b) comparing the amount of said nucleic acid in step (a) to the amount of the nucleic acid present in a control sample,





wherein an alteration in the level of the nucleic acid in step (a) as compared to the control sample indicates the presence of or predisposition to said disease in said subject.

26. The method of claim 25, wherein said subject is a human.

27. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject polypeptide of claim 10 in an amount sufficient to alleviate or prevent said pathological condition.

28. The method of claim 27, wherein said subject is a human.

29. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject nucleic acid molecule of claim 1 in an amount sufficient to alleviate or prevent said pathological condition.

30. The method of claim 29, wherein said subject is a human.

31. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject antibody of claim 12 in an amount sufficient to alleviate or prevent said pathological condition.

32. The method of claim 31, wherein said subject is a human.